

# HeRAMS Iraq

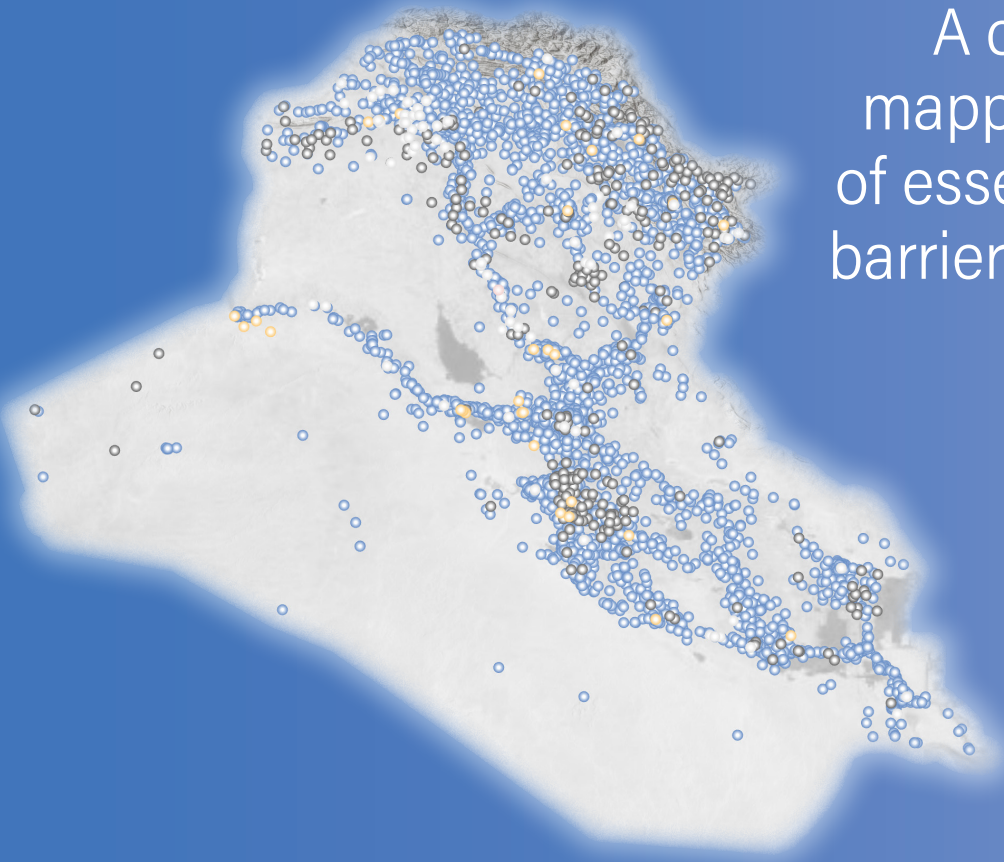
## Baseline Report 2023

### Part 2



## GENERAL CLINICAL AND TRAUMA CARE SERVICES

A comprehensive  
mapping of availability  
of essential services and  
barriers to their provision



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# HeRAMS IRAQ

## BASELINE REPORT 2023

### PART 2

General clinical  
and trauma care services

A comprehensive mapping of availability of  
essential services and barriers to their provision



World Health  
Organization



**HeRAMS**  
Health Resources and Services  
Availability Monitoring System



**USAID**  
FROM THE AMERICAN PEOPLE

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# ACRONYMS

<b>DoH</b>	Directorate of Health
<b>HeRAMS</b>	Health Resources and Services Availability Monitoring System
<b>PHCC B</b>	Primary Health Care Center - Branch
<b>PHCC F</b>	Primary Health Care Center - Family Medicine Health Care Center
<b>PHCC M</b>	Primary Health Care Center - Main
<b>PHCC MS</b>	Primary Health Care Center - Main Specialized
<b>SP Center</b>	Specialized Center
<b>UN</b>	United Nations
<b>WHO</b>	World Health Organization



# DISCLAIMER

Disruptions to health systems can impede provision of and access to essential health services. Communities' vulnerability to increased morbidity and mortality substantially increases when a lack of reliable information prevents sound decision-making, especially in rapidly changing environments requiring continued assessment. The Health Resources and Services Availability Monitoring System (HeRAMS) aims to provide decision-makers and health stakeholders at large with vital and up-to-date information on the availability of essential health resources and services, help them identify gaps and determine priorities for intervention.

HeRAMS draws on the wealth of experience and knowledge gathered by the World Health Organization (WHO) and health sector actors, including non-governmental organizations (NGOs), donors, academic institutions and other technical bodies. It builds on a collaborative approach involving health service providers at large and integrating what is methodologically sound and feasible in highly constrained, low-resourced and rapidly changing environments such as humanitarian emergencies. Rapidly deployable and scalable to support emergency response and fragile states, HeRAMS can also be expanded to - or directly implemented as - an essential component of routine health information systems. Its modularity and scalability make it an essential component of emergency preparedness and response, health systems strengthening, universal health coverage and the humanitarian development nexus.

HeRAMS has been deployed in Iraq since July 2022 and has allowed for the assessment of 1286 health facilities across the governorates of Dahuk, Erbil, and Sulaymaniyah, against 1424 health facilities targeted. This report is complemented by a first part focusing on the governorates of Anbar, Babylon, Baghdad-Karkh, Baghdad-Resafa, Basrah, Diwaniya, Diyala, Kerbala, Kirkuk, Missan, Muthanna, Najaf, Ninewa, Salah-Al-Din, Thi-Qar, and Wassit.<sup>1</sup>

This analysis was produced based on the data collected up to 25<sup>th</sup> April 2023 and while the deployment of HeRAMS, including data verification and validation, continue. Hence, this analysis is not final and is produced solely for the purposes of informing operations.

This is the second report of the **HeRAMS Iraq Baseline Report 2023 Part 2 series** focusing on the availability of essential clinical and trauma care services in the selected governorates. It is a continuation of the first report on the operational status of the health system<sup>2</sup> and should always be interpreted in conjunction with results presented in the first report. Additional reports are available covering, child health and nutrition services<sup>3</sup>, communicable disease services<sup>4</sup>, sexual and reproductive health services<sup>5</sup>, and non-communicable disease and mental health services<sup>6</sup>.

Caution must be taken when interpreting the results presented in this report. Differences between information products published by WHO, national public health authorities, and other sources using different inclusion criteria and different data cut-off times are to be expected. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change.

For additional information, please see <https://www.who.int/initiatives/herams> or contact [herams@who.int](mailto:herams@who.int).

<sup>1</sup> HeRAMS Iraq Baseline Report 2023 Part 1 - General clinical and trauma care services: A comprehensive mapping of availability of essential services and barriers to their provision, <https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part1-general-clinical-and-trauma-care-services>.

<sup>2</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - Operational status of the health system: A comprehensive mapping of the operational status health facilities, <https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-operational-status-of-the-health-system>.

<sup>3</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - Child health and nutrition services: A comprehensive mapping of availability of essential services barriers to their provision, <https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-child-health-and-nutrition-services>.

<sup>4</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - Communicable disease services: A comprehensive mapping of availability of essential services and barriers to their provision, <https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-communicable-disease-services>.

<sup>5</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - Sexual and reproductive health services: A comprehensive mapping of availability of essential services and barriers to their provision, <https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-sexual-and-reproductive-health-services>.

<sup>6</sup> HeRAMS Iraq Baseline Report 2023 Part 2 - Non-communicable disease and mental health services: A comprehensive mapping of availability of essential services and barriers to their provision, <https://www.who.int/publications/m/item/herams-iraq-baseline-report-2023-part2-ncd-and-mental-health-services>.



# PART I:

## AVAILABILITY OF GENERAL CLINICAL AND TRAUMA CARE SERVICES



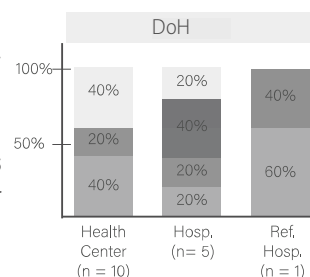
# HOW TO READ THE CHARTS

## Service availability

The first part of the report provides an overview of availability of general clinical and trauma care services. It should be noted that the analysis was limited to operational health facilities. A summary of health facilities assessed and their operational status is available on page 3. Further details on the operational status of health facilities can be found in the first report of the **HeRAMS Iraq Baseline Report 2023** series.

### Bar chart

Overall availability of general clinical and trauma care services is shown disaggregated by Directorate of Health (DoH) and health facility type. The number of health facilities included is displayed below the health facility type name.



It should be noted that the number of services included was limited to health services expected based on national guidelines and depends on the type of health facility. Further details on services included for each type of health facilities is shown in [annex I](#).

### Service availability per population (heat map)

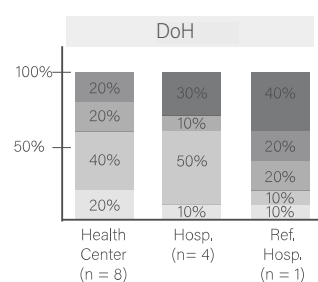
Service 1	0.9	0	0.4	2.1	0.7
Service 2	0.4	0	0.9	3.5	0.7
Service 3	0.3	0	0.7	0.3	0.2
Service 4	0.8	0	0.4	0.8	0.6
Service 5	0.5	0	0.9	1.9	0.8
	DoH A	DoH B	DoH C	DoH D	DoH E

A more detailed overview of availability of individual services is shown as heat maps. Each cell indicates the number of health facilities providing a given service in relation to the catchment population. It should be noted that different catchment areas were used for referral and specialized health services (i.e. DoH vs. governorate population estimates). For more details on population estimates, see [annex II](#).

To account for partially available services, a weighing was applied with a weight of 1 given to services reported as fully available and 0.5 for partially available services.

## Main barriers impeding service availability

### Bar chart



For services not or only partially available, main barriers impeding service delivery are displayed as percentage of all barriers reported. Alike for service availability, bar charts display main barriers disaggregated by health facility type and DoH. For each health facility type, the total number of barriers reported across the health service domain is indicated below the health facility type name. Note that for each service, up to three barriers could be reported. Hence, the percentages shown in these charts should not be used to make any conclusion on the percentage of health facilities having reported a barrier. For a conclusion on the frequency of health facilities reporting a given barrier, please refer to the heat map below.

### Heat map

Heat maps provide additional insights on main barriers for individual services by catchment area. Cell opacity levels indicate the percentage of health facilities in the catchment area reporting a given barriers. The integer inside the cell denotes the number of health facilities reporting a given barrier while the percentage indicates the percentage of health facilities reporting the barrier. Note that health facilities not reporting a barrier (i.e. health facilities where the service is fully available or not normally provided) were excluded from these charts.

Service 1	2 20%	3 60%	5 10%	1 50%	5 70%
Service 2	6 60%	2 20%	1 10%	5 50%	7 70%
Service 3	8 80%	4 40%	4 40%		2 20%
Service 4	3 30%	7 70%	1 10%		5 50%
Service 5	1 10%	3 30%	2 20%		3 30%
	DoH A	DoH B	DoH C	DoH D	DoH E

Barrier type

# OVERVIEW OF HEALTH FACILITIES EVALUATED

Summary of health facilities evaluated

1423 targeted health facilities



1286 health facilities assessed

  
Building condition



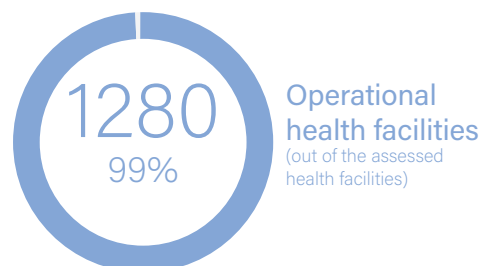
  
Equipment condition



  
Functionality

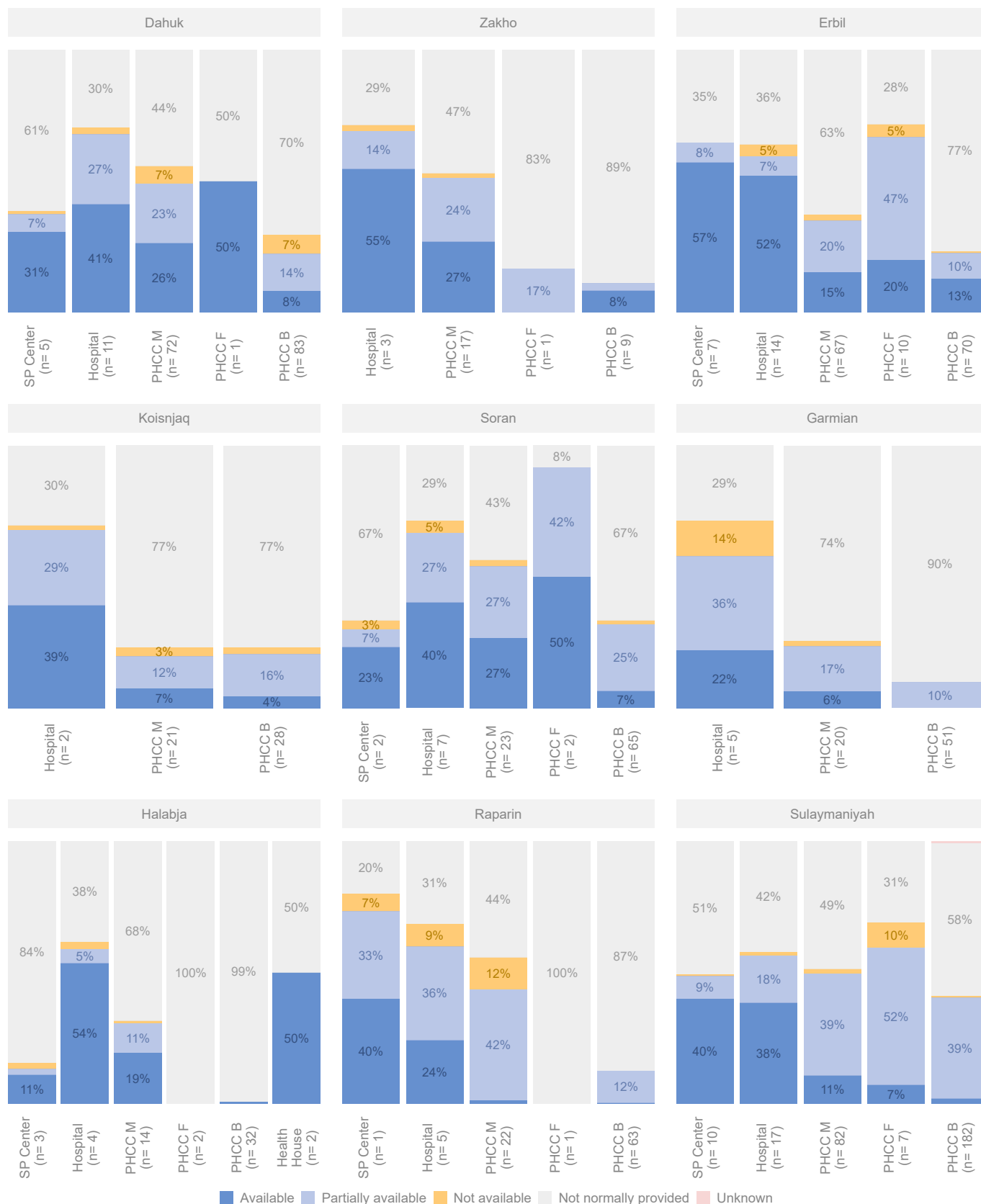


  
Accessibility



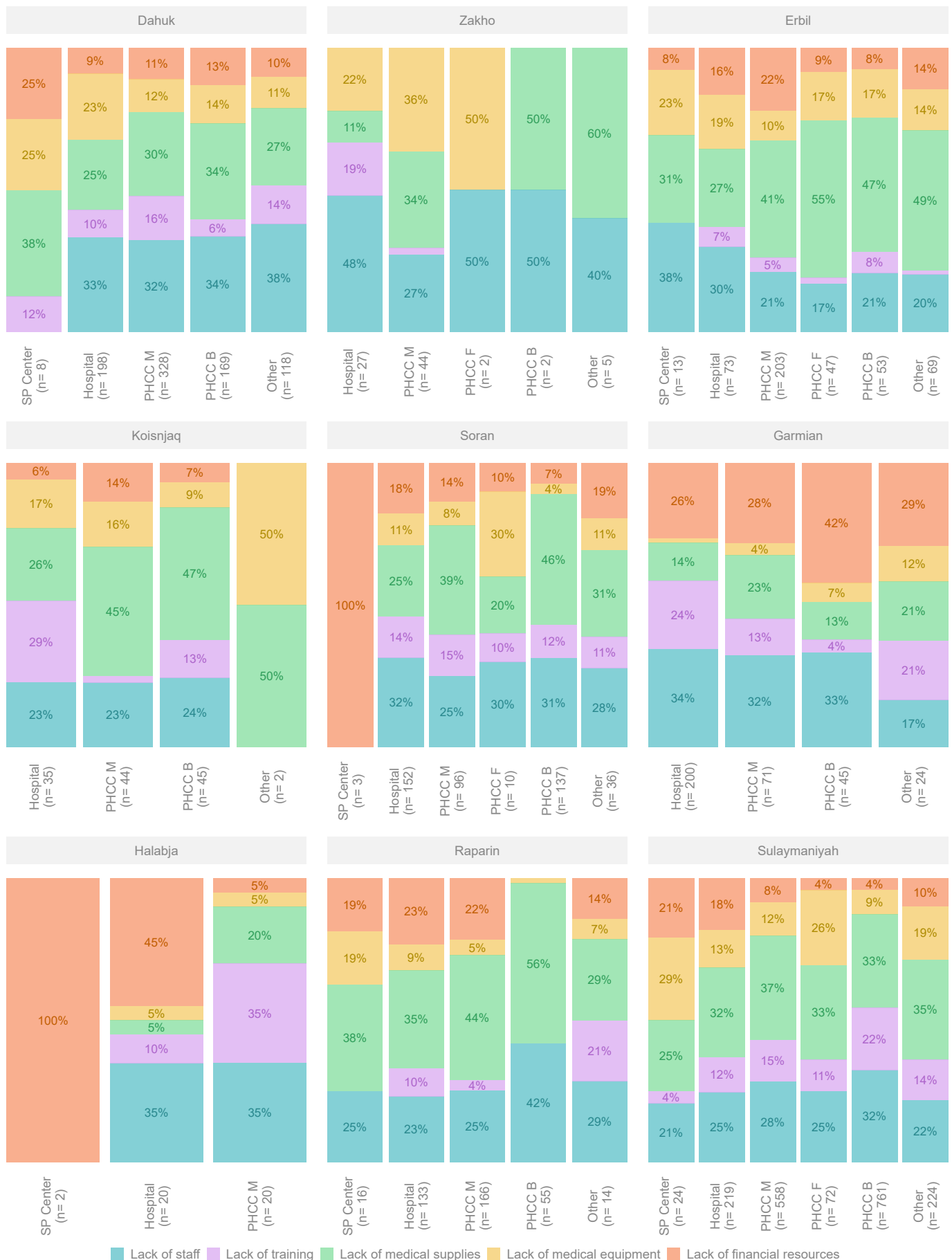
# SERVICE AVAILABILITY AND MAIN BARRIERS BY HEALTH FACILITY TYPE

Availability of essential services by DoH and health facility type<sup>6</sup>



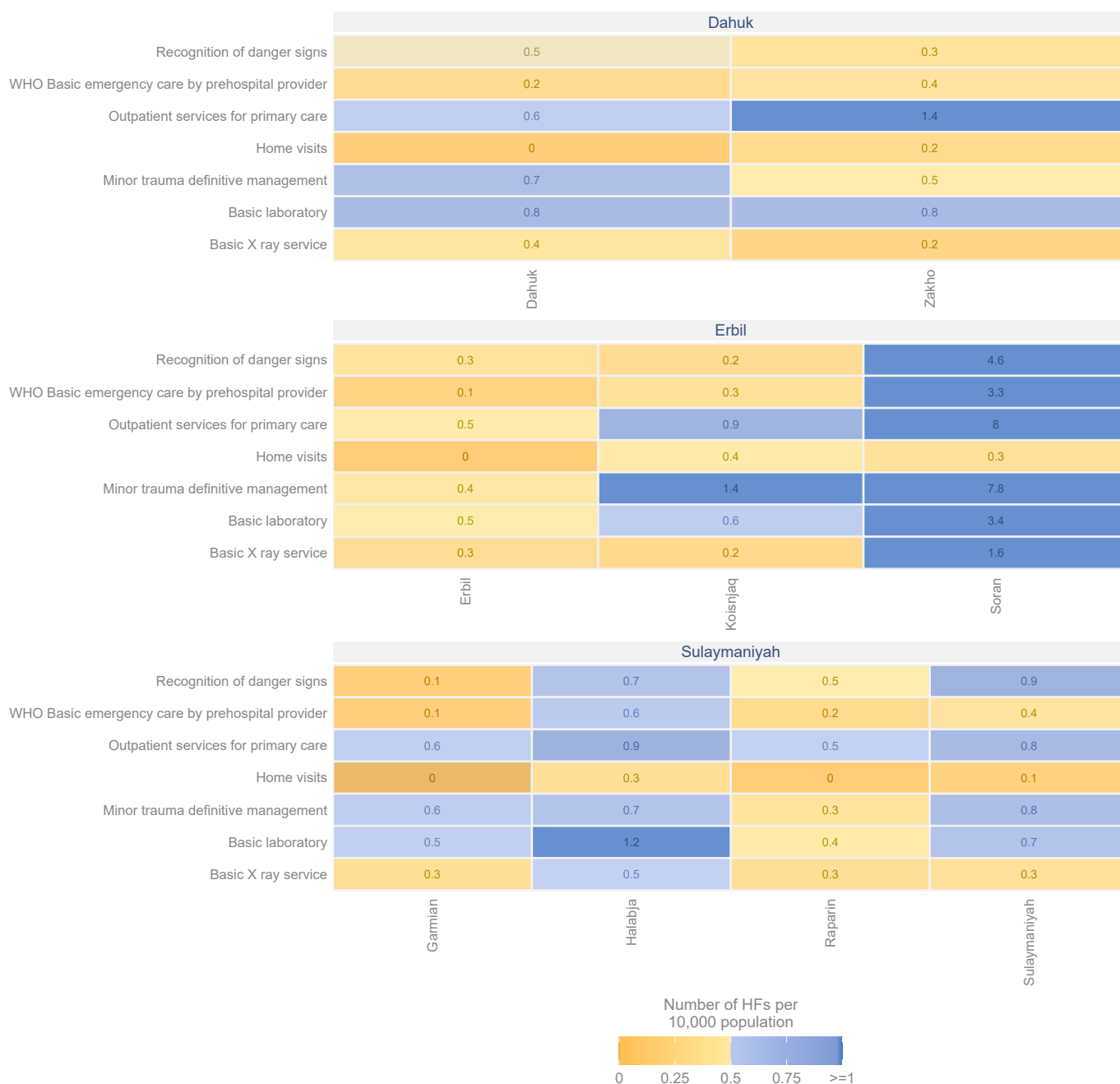
<sup>6</sup> Number of services included may vary from one health facility type to another. The "Other" HF type has been excluded as it includes very different and specialized HFs. See [Annex I](#) for a full description of the services included for each health facility type.

## Main barriers impeding availability of essential health services by DoH and health facility type



# SERVICE AVAILABILITY BY CATCHMENT POPULATION

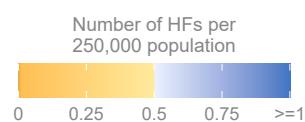
Number of health facilities providing essential community and primary services per 10,000 population<sup>7</sup>



<sup>7</sup> See annex II for population estimates.

Number of health facilities providing specialized services per 250,000 population<sup>8</sup>

	Dahuk	Erbil	Sulaymaniyah
Request for ambulance services by the patient	8.1	4.8	4.2
Acuity based formal triage	4.8	4	2.9
WHO Basic Emergency Care	5.8	5	13
Advanced Syndrome based management	1.4	2	2.6
Monitored referral	13.5	6.8	10.7
Referral capacity	11	7.8	14.2
Acceptance of referrals	6.5	6.3	6.2
Acceptance of complex referrals	2.6	4.2	4
Outpatient department for secondary care	5.4	8.3	6.7
Emergency and elective surgery	1.7	1.3	1.9
Emergency and elective surgery with at least two operating theatres	1.2	0.9	1.5
Orthopedic/trauma ward	0.6	0.9	0.7
Short hospitalization capacity	3.7	4.7	5.1
20 Inpatient bed capacity	2.4	3.4	3.3
50 inpatient bed capacity	1.7	1.6	1.8
Inpatient critical care management	2.1	1.8	1.5
Intensive care unit	1.8	1.3	1.1
Laboratory services secondary level	9.6	6.8	8.5
Laboratory services tertiary level	2	2.8	3.5
Blood bank services	2.7	3.3	2.3
Hemodialysis unit	1.7	0.7	0.7
Radiology unit	4.2	2.2	2.2
Medical evacuation procedures	1.1	2.3	0.5
Procedures for mass casualty scenarios	1	1.9	0.9

<sup>8</sup> See annex II for population estimates.

# MAIN BARRIERS IMPEDING SERVICE DELIVERY

Main barriers impeding availability of essential community and primary health services by DoH

## Dahuk

	Dahuk					Zakho			
Recognition of danger signs	56 82%	28 41%	31 46%	9 13%	8 12%	3 4%	2 3%	1 1%	1 1%
WHO Basic emergency care by prehospital provider	46 74%	23 37%	34 55%	14 23%	7 11%	3 5%	1 2%	1 2%	2 3%
Outpatient services for primary care	23 79%	15 52%	22 76%	2 7%	6 21%				
Home visits	6 67%	2 22%	2 22%	3 33%	3 33%	1 11%			
Minor trauma definitive management	50 56%	5 6%	60 67%	25 28%	25 28%	2 2%		10 11%	4 4%
Basic laboratory	43 58%	7 9%	46 62%	28 38%	22 30%	10 14%		7 9%	12 16%
Basic X-ray service	22 71%	9 29%	20 65%	14 45%	8 26%	2 6%		1 3%	1 3%

## Erbil

	Erbil					Koisnjq					Soran				
Recognition of danger signs	11 18%	2 3%	12 20%	7 11%	8 13%	2 3%		1 2%	1 2%	1 2%	25 41%	13 21%	30 49%	5 8%	5 8%
WHO Basic emergency care by prehospital provider	8 22%	2 5%	7 19%	1 3%	3 8%	2 5%	1 3%	2 5%	1 3%	1 3%	16 43%	10 27%	19 51%	2 5%	6 16%
Outpatient services for primary care	12 12%	2 2%	46 46%	6 6%	12 12%	4 4%	2 2%	6 6%	3 3%	1 1%	27 27%	14 14%	30 30%	3 3%	2 2%
Home visits	1 14%	1 14%	1 14%	1 14%		1 14%		2 29%		1 14%	2 29%	1 14%	2 29%	1 14%	
Minor trauma definitive management	12 8%	3 2%	44 31%	13 9%	10 7%	10 7%	5 4%	28 20%	7 5%	5 4%	30 21%	13 9%	61 43%	3 2%	11 8%
Basic laboratory	24 30%	8 10%	57 70%	11 14%	21 26%	7 9%	2 2%	7 9%	1 1%		8 10%	3 4%	8 10%	3 4%	5 6%
Basic X-ray service	22 37%	2 3%	23 38%	15 25%	15 25%	1 2%	1 2%	1 2%			7 12%	1 2%	4 7%	8 13%	7 12%

## Sulaymaniyah

	Garmian					Halabja					Raparin					Sulaymaniyah				
Recognition of danger signs	5 2%	2 1%	3 1%	1 0%	3 1%	1 0%	1 0%				25 10%	2 1%	30 12%	2 1%	6 2%	193 78%	130 52%	178 72%	49 20%	14 6%
WHO Basic emergency care by prehospital provider	4 4%	6 5%	2 2%	1 1%	4 4%	2 2%	3 3%	2 2%	1 1%		15 14%	4 4%	22 20%	1 1%	2 2%	71 64%	49 44%	63 57%	26 23%	9 8%
Outpatient services for primary care	22 10%	6 3%	24 11%	4 2%	20 9%	1 0%		1 0%			9 4%	4 2%	37 18%	2 1%	29 14%	115 55%	70 33%	135 64%	40 19%	12 6%
Home visits											5 20%		2 8%	2 8%	3 12%	15 60%	6 24%	11 44%	9 36%	3 12%
Minor trauma definitive management	20 8%	5 2%	12 5%	4 2%	25 9%	1 0%	2 1%	2 1%	1 0%	1 0%	16 6%	2 1%	29 11%	1 0%	6 2%	135 51%	89 34%	194 73%	47 18%	45 17%
Basic laboratory	10 8%	4 3%	3 2%	2 2%	9 7%	1 1%	1 1%				9 7%	2 2%	18 14%	3 2%	9 7%	46 36%	19 15%	89 70%	34 27%	27 21%
Basic X-ray service	7 8%	1 1%	4 5%		7 8%	2 2%				2 2%	8 9%	2 2%	11 13%	5 6%	13 15%	35 41%	11 13%	27 32%	31 36%	15 18%

% of HFs reporting a barrier



Type of barrier



## Main barriers impeding availability of specialized services by governorate

	Dahuk					Erbil					Sulaymaniyah				
Request for ambulance services by the patient	23 82%	10 36%	18 64%	8 29%	7 25%	8 33%		4 17%	19 79%	11 46%	32 82%	18 46%	22 56%	18 46%	15 38%
Acuity-based formal triage	37 80%	25 54%	27 59%	5 11%	4 9%	12 50%	11 46%	14 58%	3 12%	7 29%	23 77%	8 27%	20 67%	2 7%	15 50%
WHO Basic Emergency Care	28 76%	19 51%	22 59%	6 16%	4 11%	28 68%	17 41%	30 73%	9 22%	7 17%	180 86%	136 65%	193 92%	53 25%	13 6%
Advanced Syndrome-based management	4 67%	4 67%	2 33%	2 33%	1 17%	7 70%	2 20%	8 80%	1 10%	4 40%	17 77%	13 59%	16 73%	7 32%	7 32%
Monitored referral	39 91%	14 33%	18 42%	8 19%	6 14%	25 69%	10 28%	12 33%	15 42%	4 11%	96 86%	69 62%	74 67%	40 36%	15 14%
Referral capacity	19 90%	8 38%	8 38%	7 33%	5 24%	27 61%	10 23%	11 25%	22 50%	13 30%	125 65%	75 39%	125 65%	109 57%	54 28%
Acceptance of referrals	10 71%	4 29%	8 57%	6 43%	2 14%	15 88%	3 18%	11 65%	2 12%	7 41%	27 73%	15 41%	30 81%	14 38%	8 22%
Acceptance of complex referrals	2 50%	1 25%	2 50%	1 25%		4 57%		7 100%	3 43%		16 89%	8 44%	12 67%	5 28%	6 33%
Outpatient department for secondary care	7 88%	3 38%	4 50%	1 12%	3 38%	22 42%	4 8%	44 83%	5 9%	9 17%	45 55%	23 28%	77 94%	11 13%	20 24%
Emergency and elective surgery	4 80%		3 60%	3 60%		3 75%	1 25%	2 50%	2 50%	2 50%	12 67%	6 33%	13 72%	3 17%	10 56%
Emergency and elective surgery with at least two operating theatres	3 75%		2 50%	2 50%		4 80%	1 20%	2 40%		1 20%	10 67%	6 40%	9 60%	4 27%	10 67%
Orthopedic/trauma ward	1 50%		2 100%	1 50%		2 100%		1 50%	1 50%		3 43%	2 29%	6 86%	1 14%	6 86%
Short hospitalization capacity	3 100%		3 100%	1 33%	1 33%	7 78%	1 11%	7 78%		2 22%	17 81%	8 38%	18 86%	7 33%	7 33%
20 Inpatient bed capacity				1 100%		10 91%	6 55%	8 73%			11 61%	4 22%	13 72%	9 50%	10 56%
50 inpatient bed capacity	1 50%		1 50%	1 50%		7 88%	1 12%	4 50%	3 38%	1 12%	6 67%	1 11%	8 89%	3 33%	6 67%
Inpatient critical care management	3 100%	1 33%	2 67%	1 33%	1 33%	3 43%	2 29%	4 57%	3 43%	2 29%	7 70%	3 30%	8 80%	3 30%	4 40%
Intensive care unit	4 100%	2 50%	2 50%	1 25%		5 62%	3 38%	5 62%	2 25%	2 25%	9 90%	4 40%	7 70%	1 10%	8 80%
Laboratory services secondary level	32 65%	10 20%	30 61%	25 51%	12 24%	18 53%	5 15%	32 94%	6 18%	9 26%	34 41%	21 25%	69 83%	23 28%	36 43%
Laboratory services tertiary level	7 58%	2 17%	8 67%	7 58%	5 42%	3 50%		5 83%		5 83%	4 22%	3 17%	13 72%	8 44%	10 56%
Blood bank services	2 25%	1 12%	3 38%	6 75%	2 25%	3 43%	3 43%	4 57%	2 29%	2 29%	8 89%	1 11%	4 44%		7 78%
Hemodialysis unit	2 100%		2 100%	2 100%		2 67%	1 33%	2 67%	1 33%	1 33%	1 50%		2 100%	1 50%	2 100%
Radiology unit	20 59%	4 12%	24 71%	18 53%	4 12%	7 26%	1 4%	10 37%	10 37%	15 56%	11 48%	5 22%	10 43%	12 52%	17 74%
Medical evacuation procedures				1 100%		5 31%	7 44%	3 19%	9 56%	8 50%	2 67%	1 33%			3 100%
Procedures for mass casualty scenarios						4 40%	5 50%		3 30%	5 50%	6 75%	5 62%	3 38%	1 12%	4 50%

% of HFs reporting a barrier

1% 25% 50% 75% 100%

Type of barrier

Lack of staff Lack of training Lack of medical supplies

Lack of medical equipment Lack of financial resources

# PART II:

## IN-DEPTH ANALYSIS BY HEALTH SERVICE

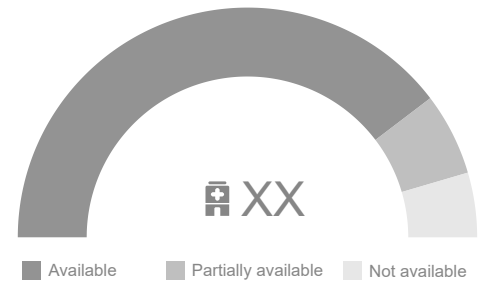


# HOW TO READ THE CHARTS AND THE MAPS

## Indicator status

### Arc charts

For each indicator, an arc chart provides an overview of the overall status (i.e. functionality, availability, sufficiency, etc.), hereafter referred to as "availability". The total number of health facilities included in the analysis of an indicator is shown inside the arc chart. It is important to note that the total number of health facilities included in the analysis of an indicator can vary due to the exclusion of non-operational and non-reporting health facilities from subsequent analyses (see page 3 for details).



The status of an indicator is further broken down by DoH and or type of health facility.

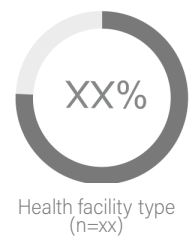
### Column charts

Column charts display the status of an indicator by DoH. The number of health facilities in a DoH is shown below the DoH's name.

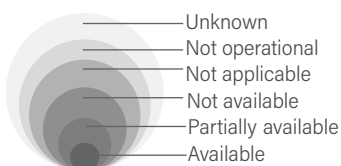


### Donut charts

Each donut chart represents a type of health facility. The percentage of health facilities for which the indicators was available or partially available is shown inside the donut while the total number of health facilities included is shown at the bottom of the chart, below the health facility type name. If an indicator was not available in any health facility, the number inside the chart will display the percentage of health facilities for which the indicator was partially or not available.



## Maps



Maps display the availability of an indicator at the DoH level. In contrast to charts and to highlight areas not reporting, respectively the impact of non-operational health facilities, maps depict all health facilities included in the HeRAMS assessment. The outermost circle corresponds to the cumulative number of health facilities in a DoH. Each circle may be divided into multiple smaller circles, with each color representing the proportion of health facilities of a specific availability status.

For each circle, the corresponding DoH name is shown in the map label together with the total number of health facilities evaluated (excluding non-reporting health facilities and health facilities where the indicator is not applicable or not relevant). The second number displays by default the percentage of evaluated health facilities for which the indicator was fully available. Any deviation from this is clearly stated in the map legend.

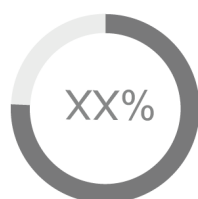
### Map label:

DoH name  
X / X%

## Reasons of unavailability

If an indicator was not or only partially available, main reasons of unavailability (i.e. causes of damage, reasons for non-functionality, etc.) were collected. Similarly, indicators assessing availability and sufficiency of basic amenities may have a sub-question gathering additional information on the type of amenity available. Alike reasons of unavailability, types of amenities are only evaluated if the amenity was at least partially available. For simplicity reasons, causes of damage, non-functionality and inaccessibility, reasons of unavailability, types of basic amenities, and type of support provided by partners are hereafter commonly referred to as "reasons".

### Donut charts



Each donut chart indicates the percentage of health facilities having reported a given reason. The total number of health facilities reporting at least one reason is shown below the chart header.

### Bar charts

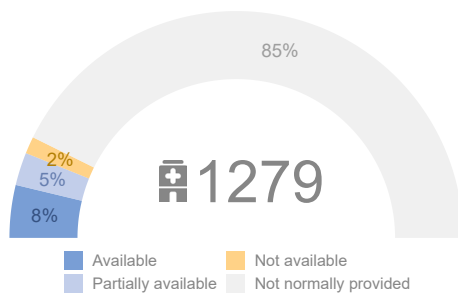
Bar charts depicting reasons follow the same logic as donut charts and exclude health facilities where the indicator was fully available. The number of health facilities reporting at least one reason is displayed below the DoH's name.



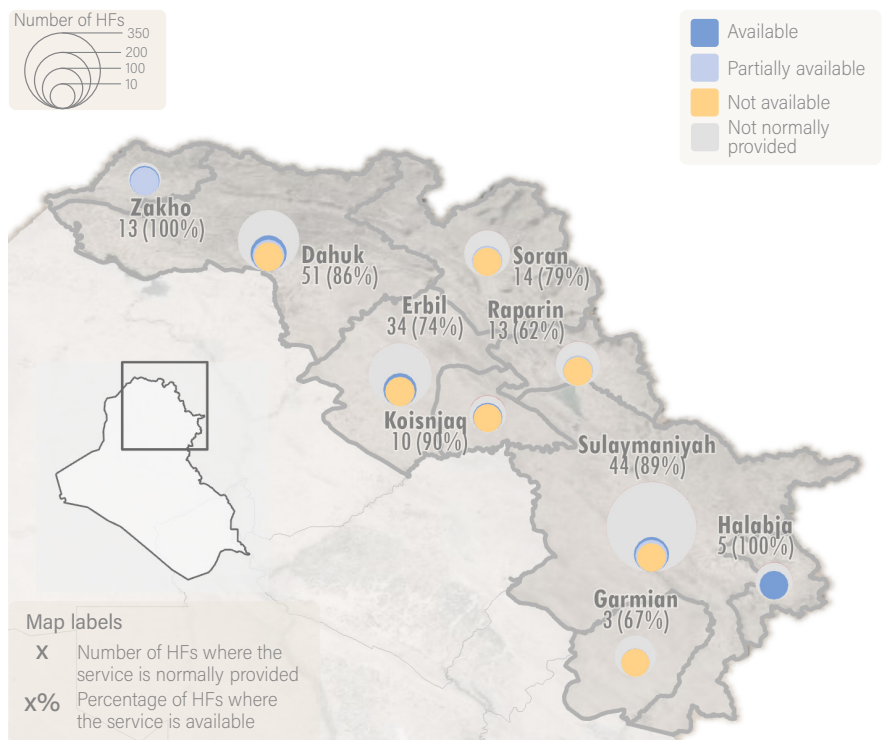
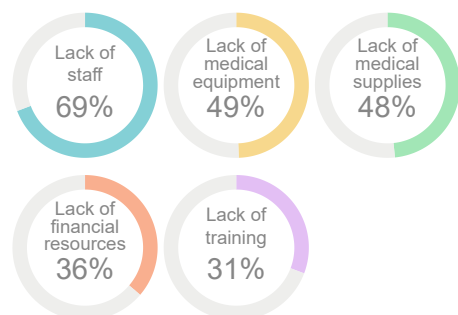
**Important:** The denominators for reasons charts exclude health facilities where the indicator was fully available or in the case of basic amenities not available. It should further be noted that health facilities could report up to three reasons for each indicator. Thus, the sum of all reasons may exceed 100%.

# REQUEST FOR AMBULANCE SERVICES BY THE PATIENT

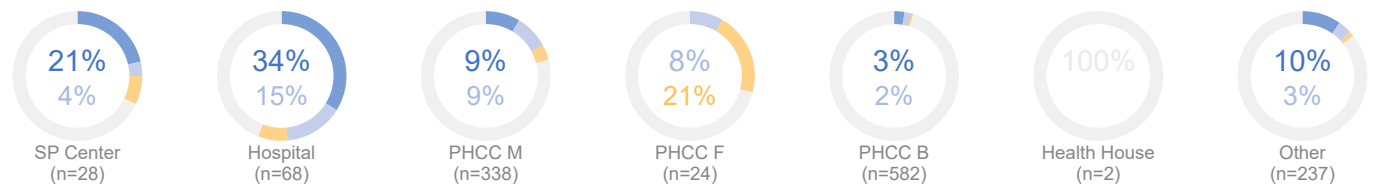
## Service availability



## Main barriers impeding service delivery n = 91



## Service availability by type of HF

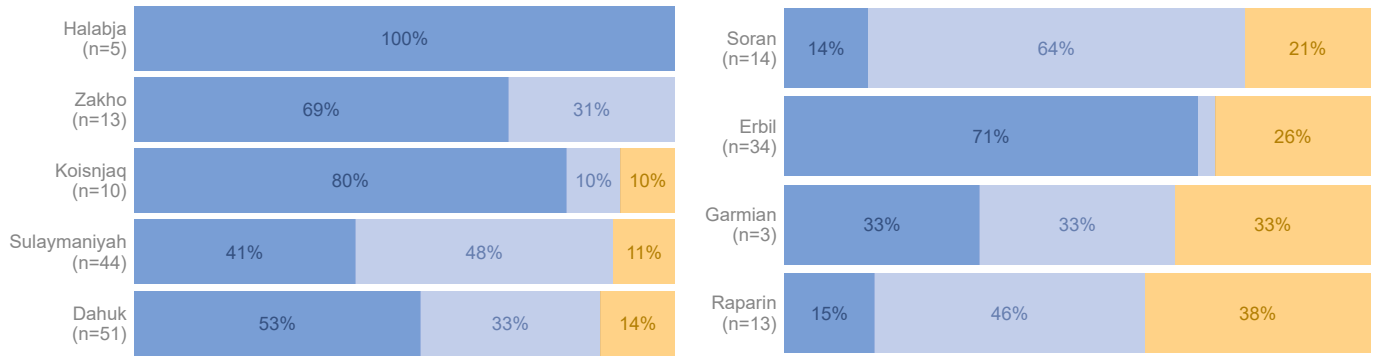


## Main barriers impeding service delivery by DoH



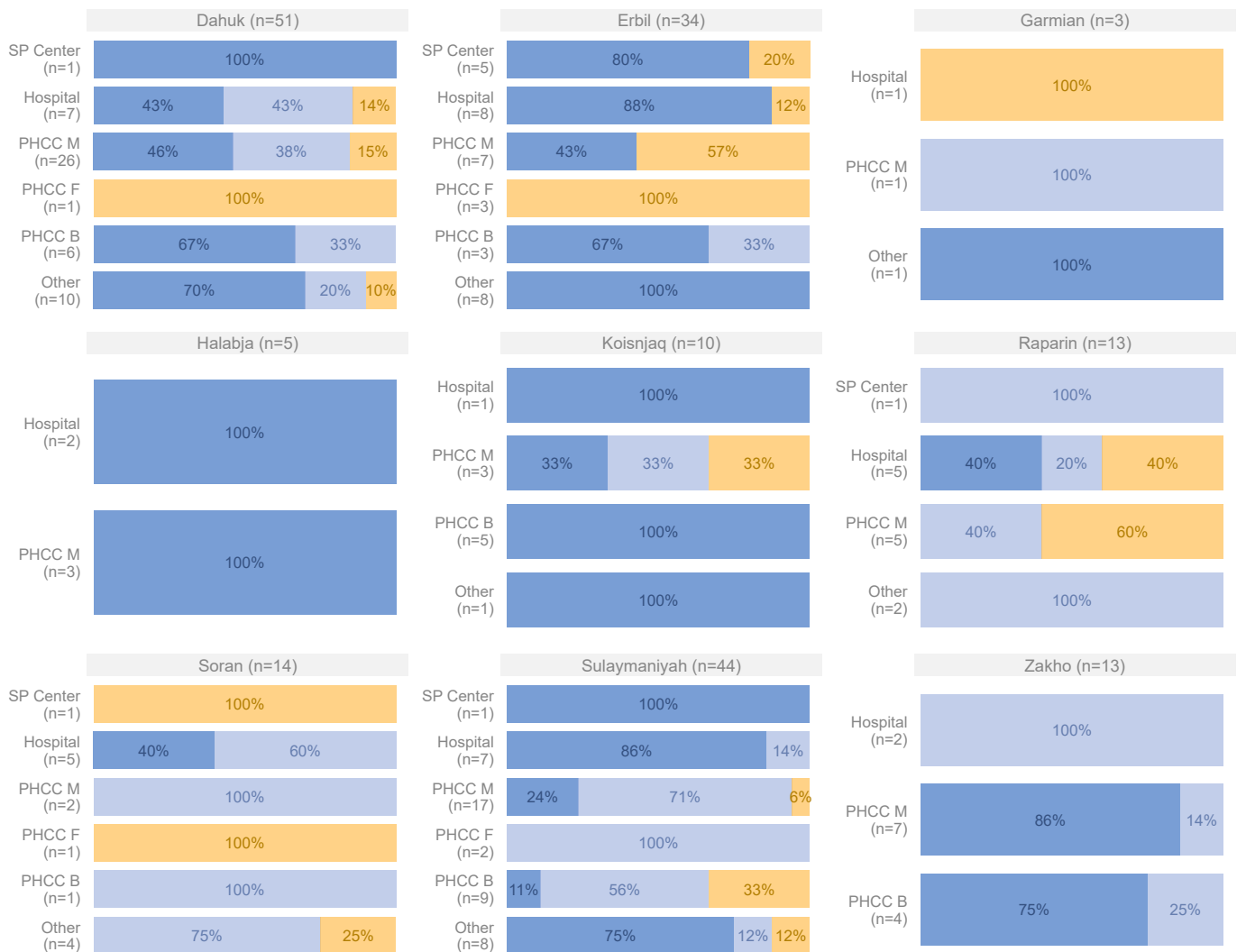
## Service availability by DoH\*

Available Partially available Not available



## Service availability by DoH and by type of HF\*

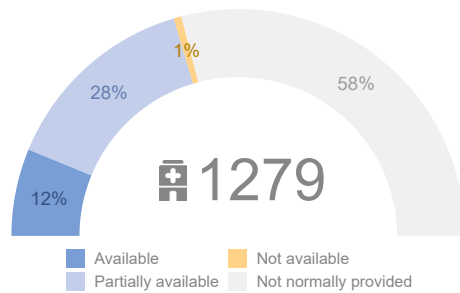
Available Partially available Not available



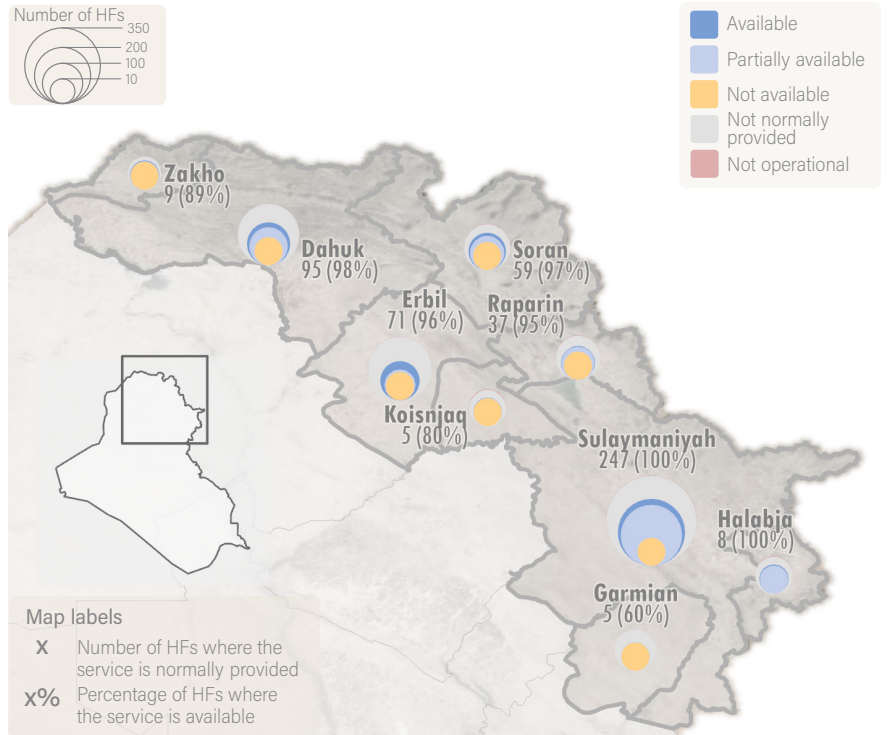
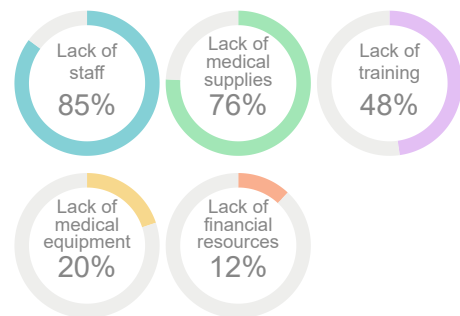
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# RECOGNITION OF DANGER SIGNS

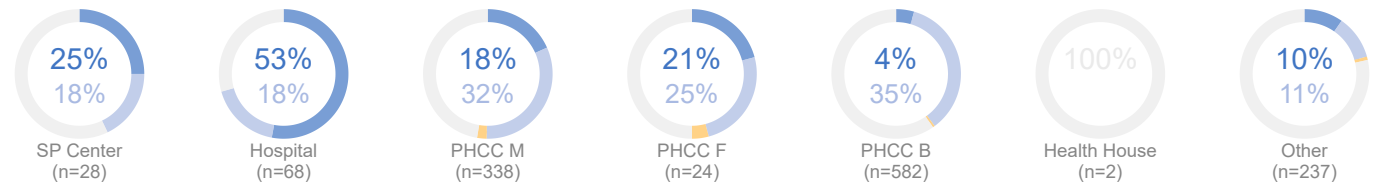
## Service availability



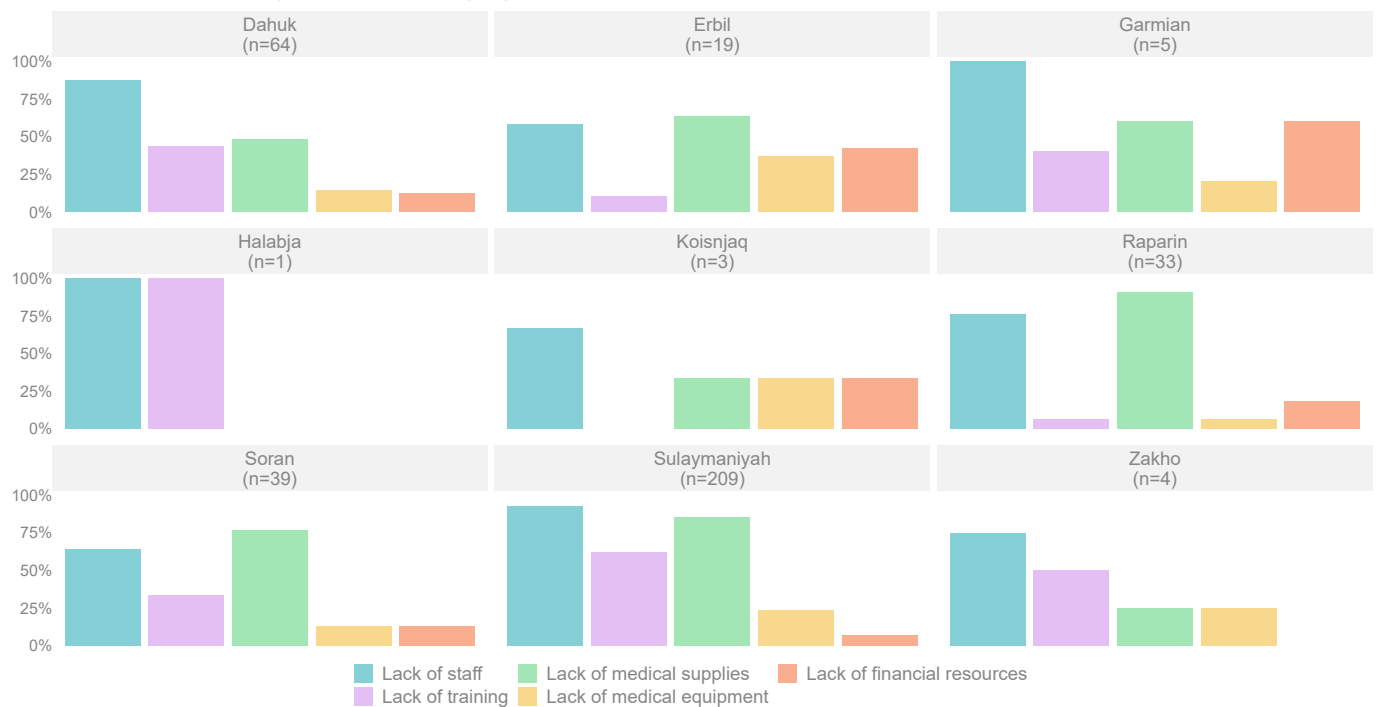
## Main barriers impeding service delivery n = 377



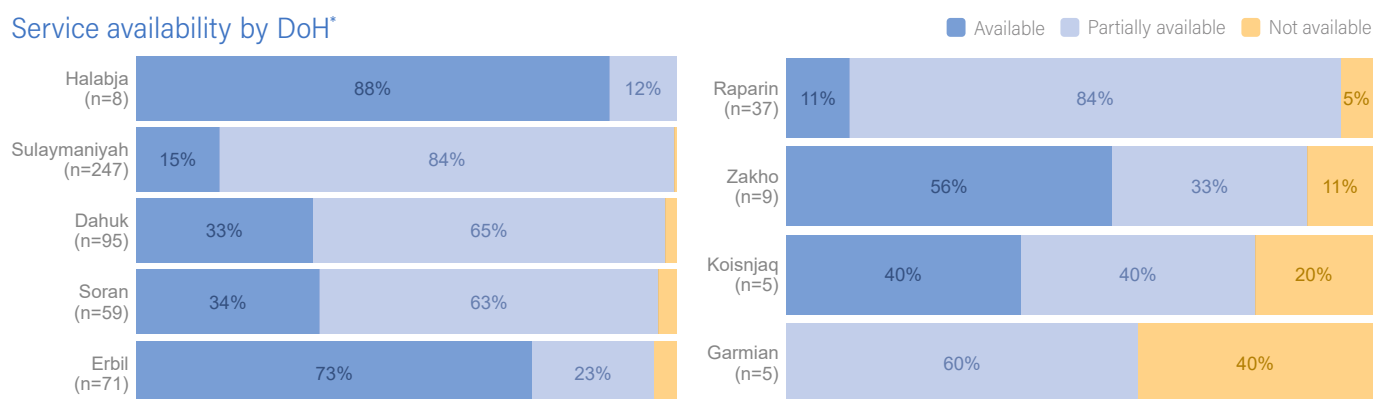
## Service availability by type of HF



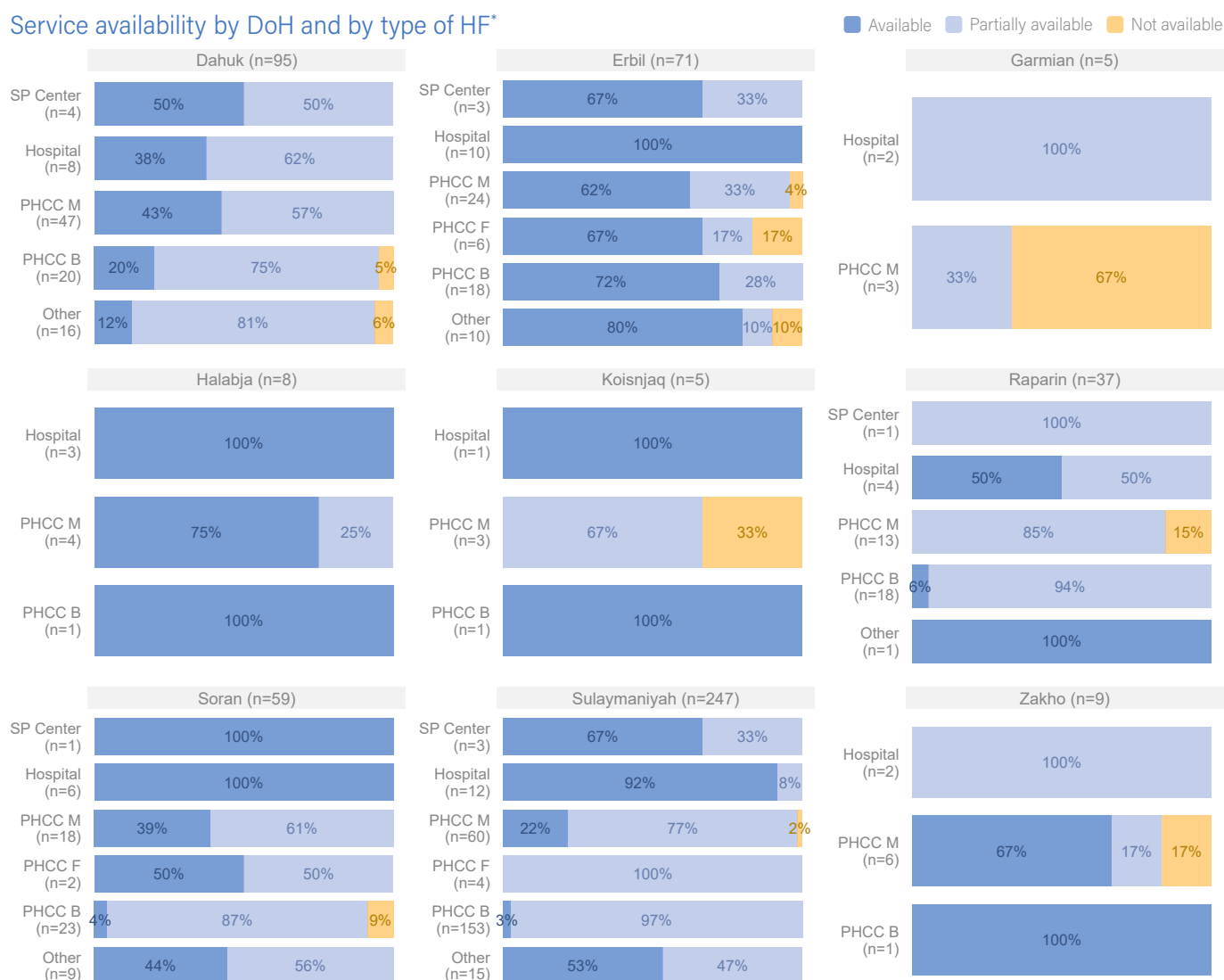
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



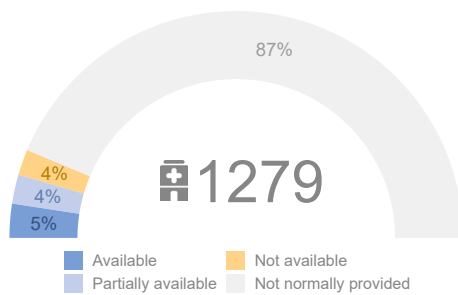
## Service availability by DoH and by type of HF\*



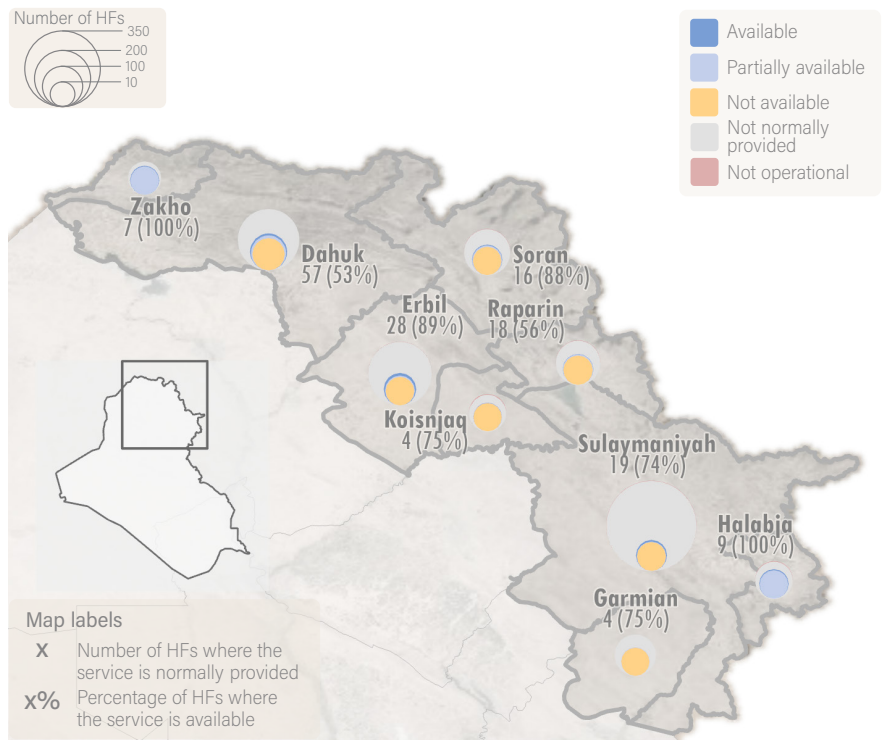
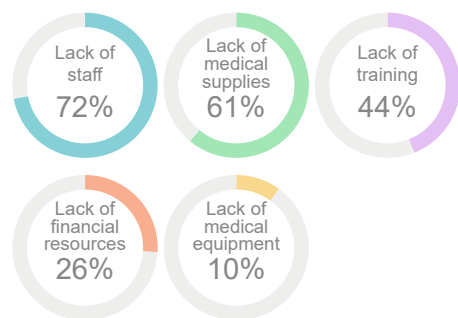
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# ACUITY-BASED FORMAL TRIAGE

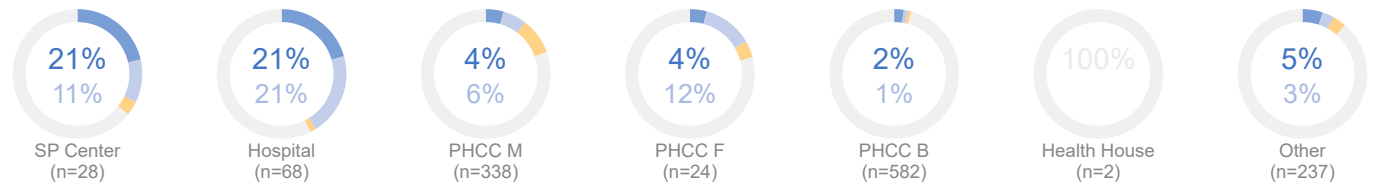
## Service availability



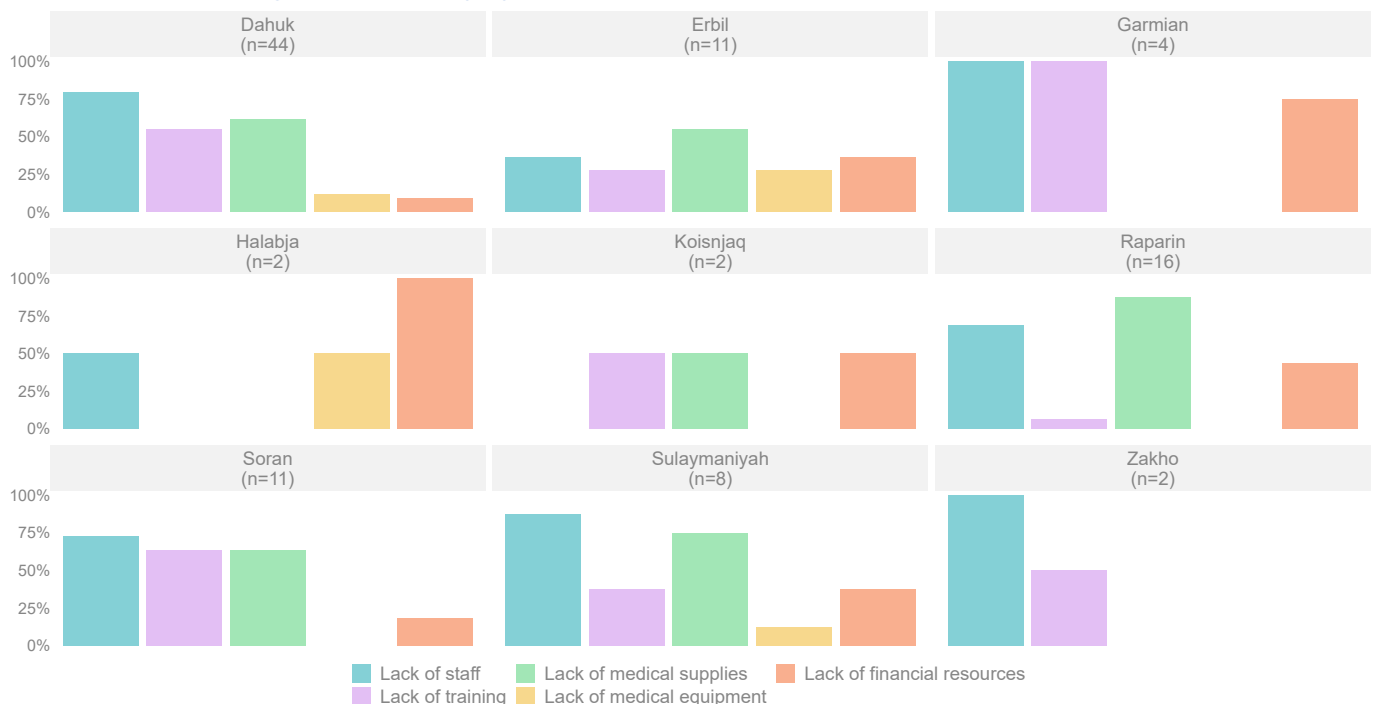
## Main barriers impeding service delivery n = 100



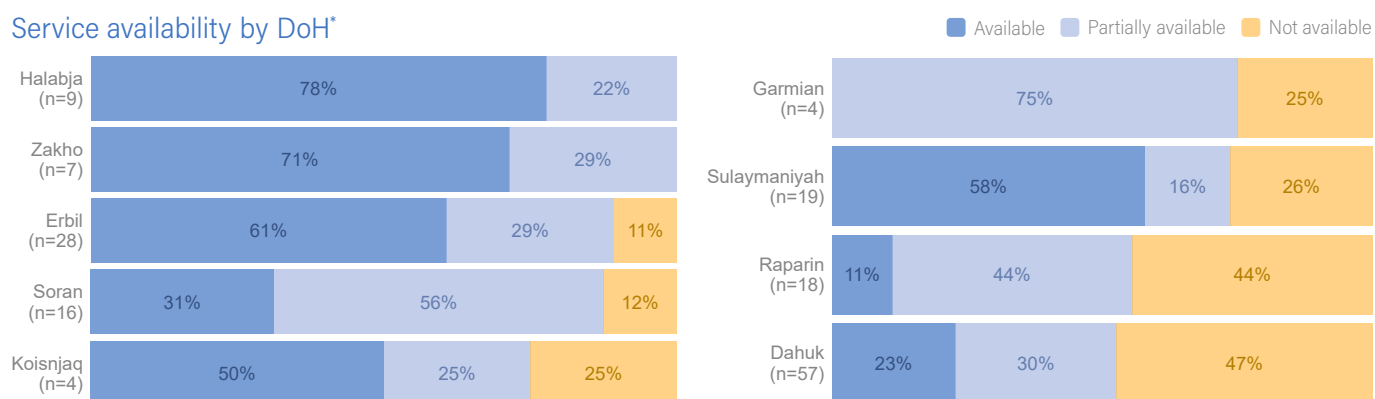
## Service availability by type of HF



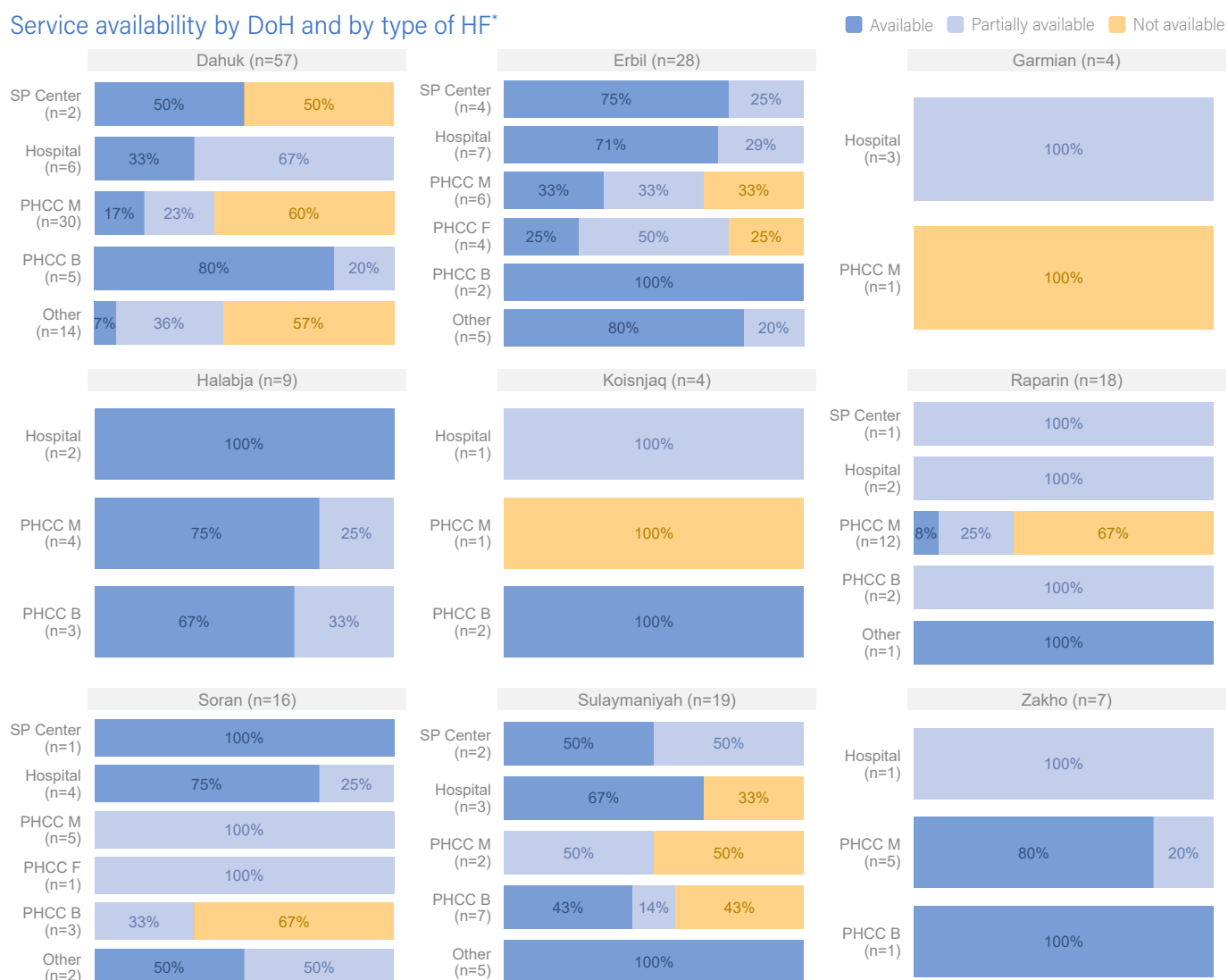
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



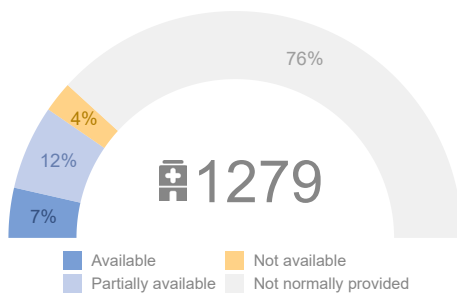
## Service availability by DoH and by type of HF\*



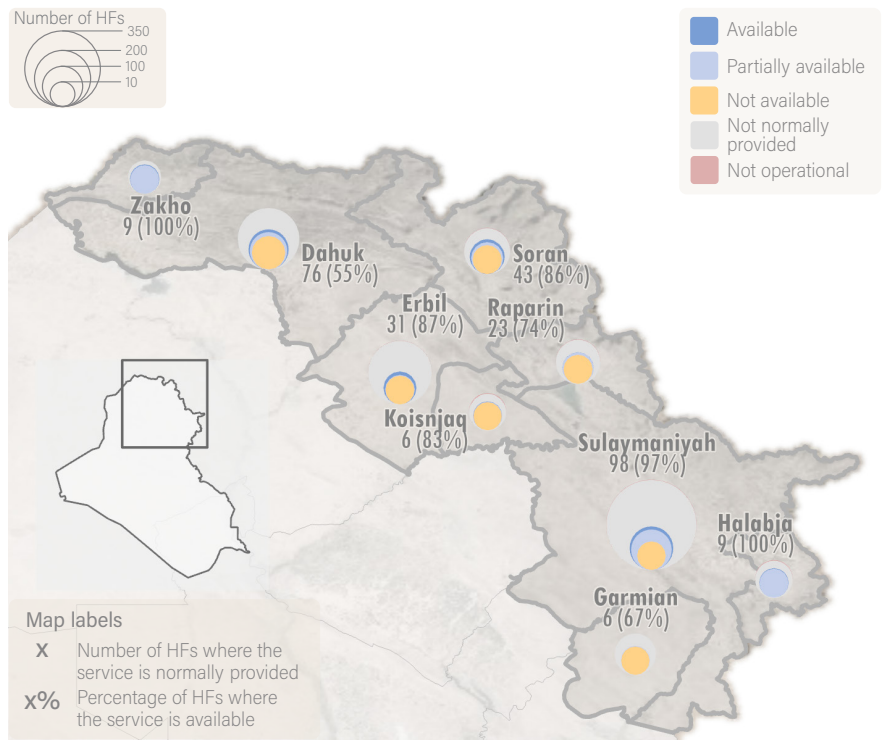
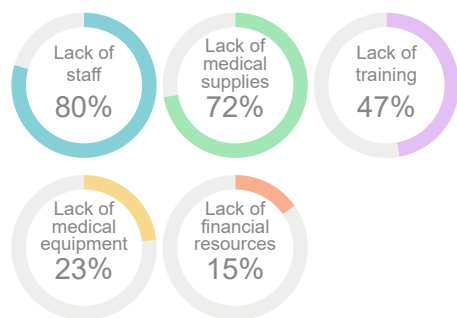
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# WHO BASIC EMERGENCY CARE BY PREHOSPITAL PROVIDER

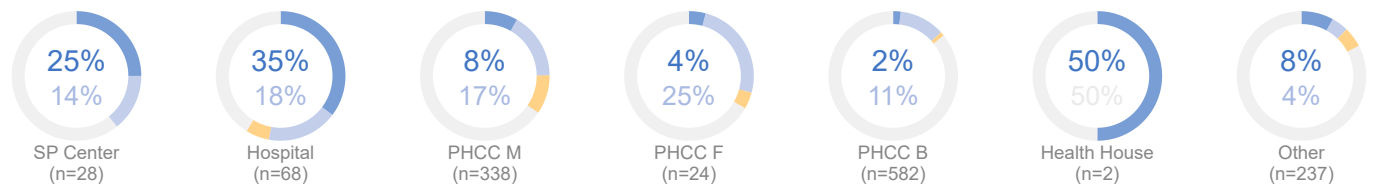
## Service availability



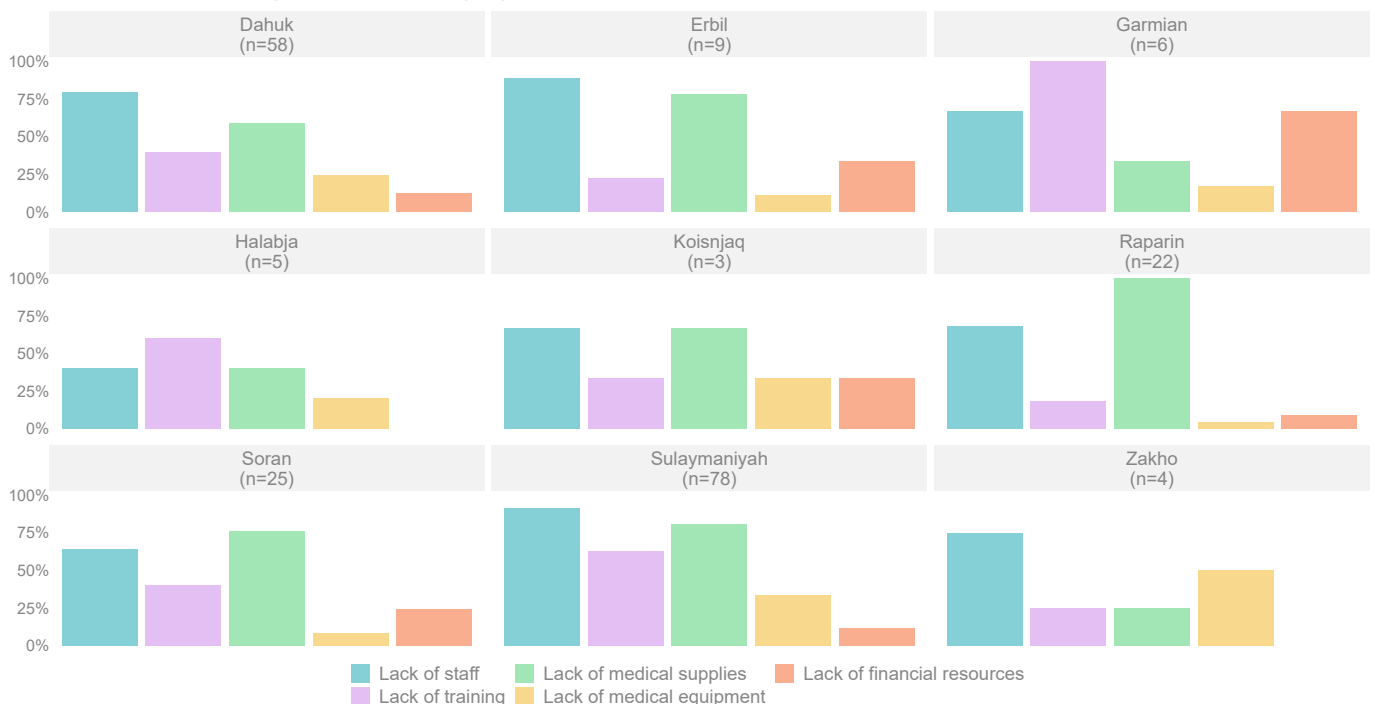
## Main barriers impeding service delivery n = 210



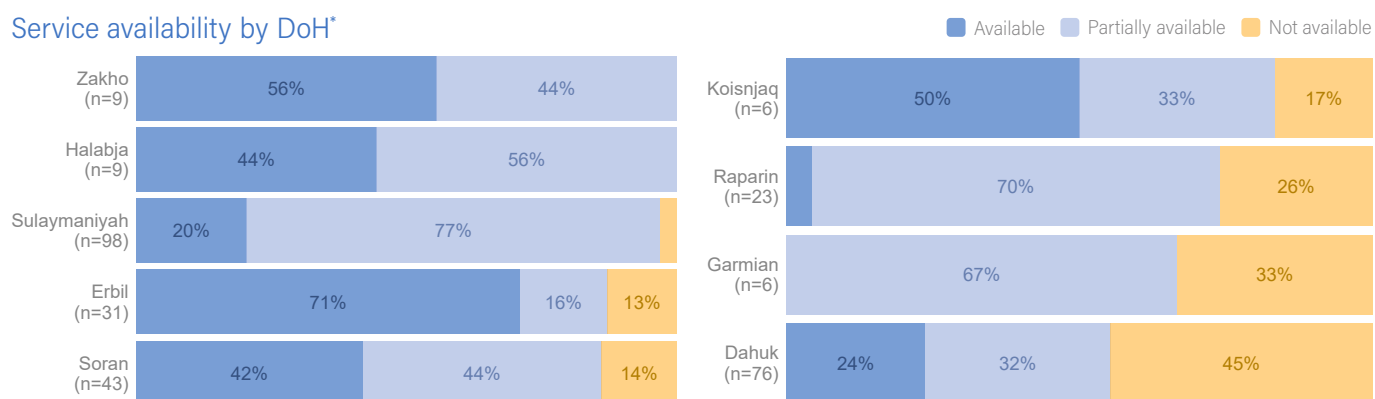
## Service availability by type of HF



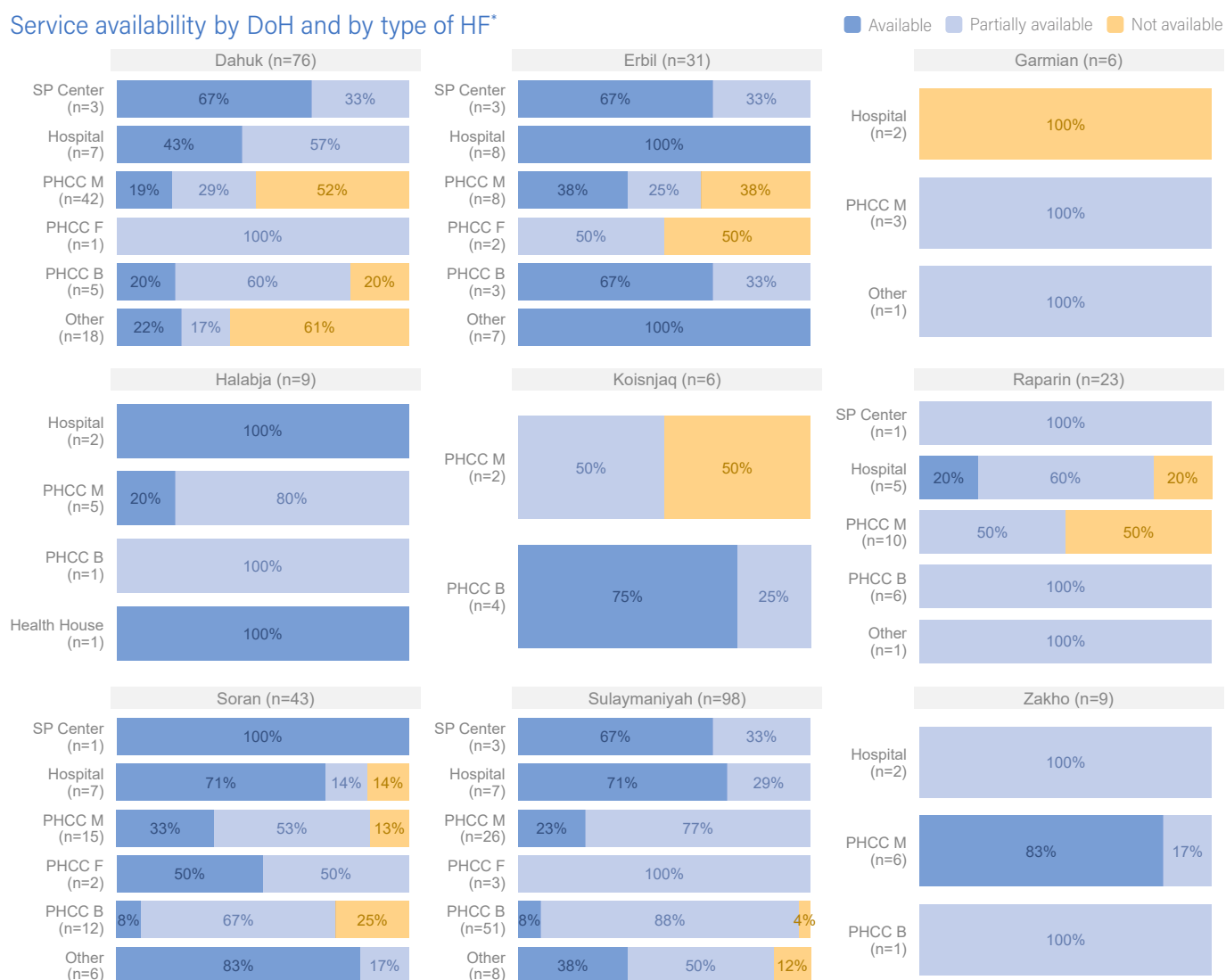
## Main barriers impeding service delivery by DoHv



## Service availability by DoH\*



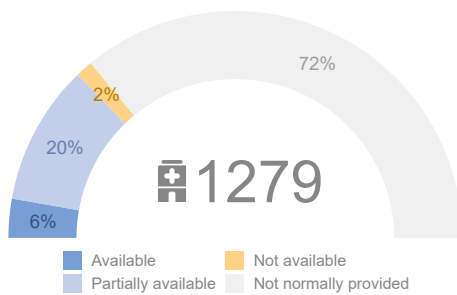
## Service availability by DoH and by type of HF\*



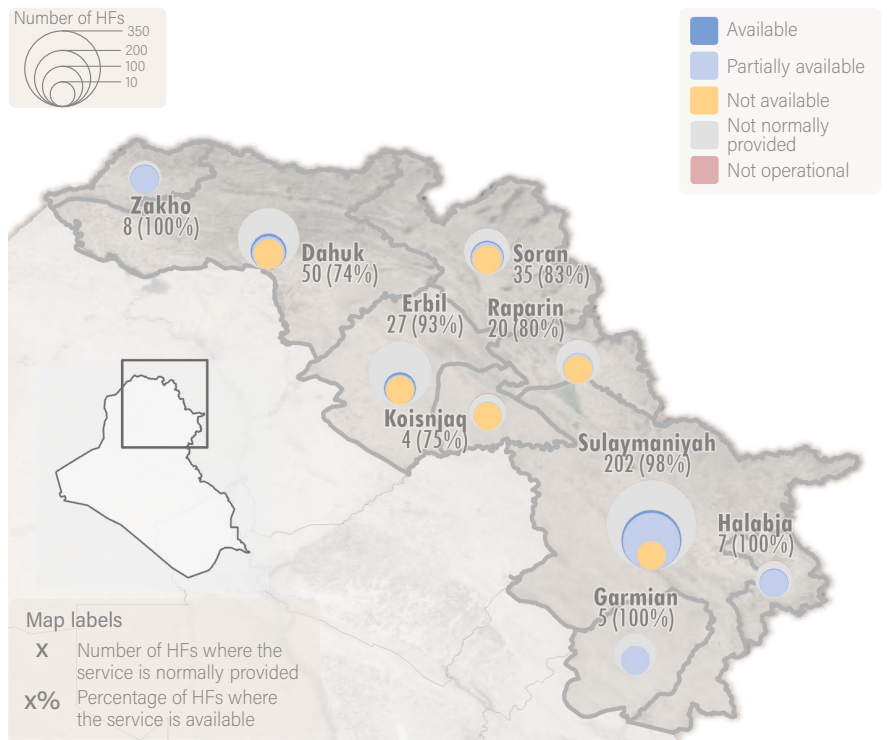
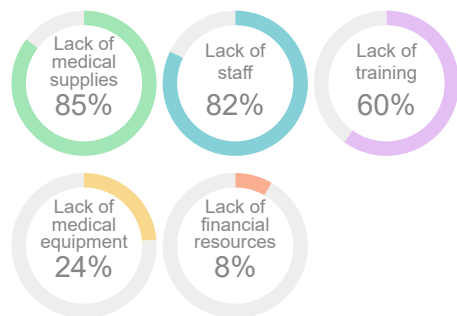
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# WHO BASIC EMERGENCY CARE

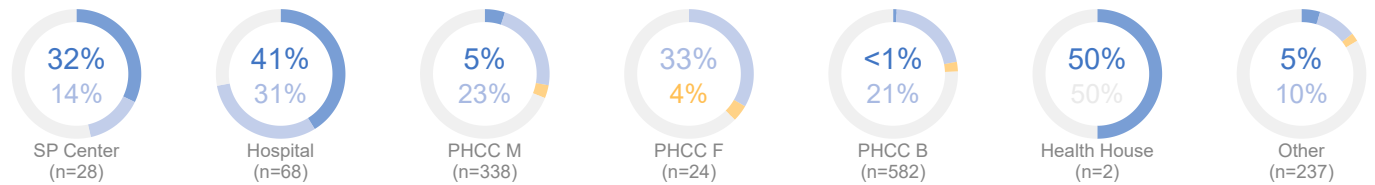
## Service availability



## Main barriers impeding service delivery n = 287



## Service availability by type of HF

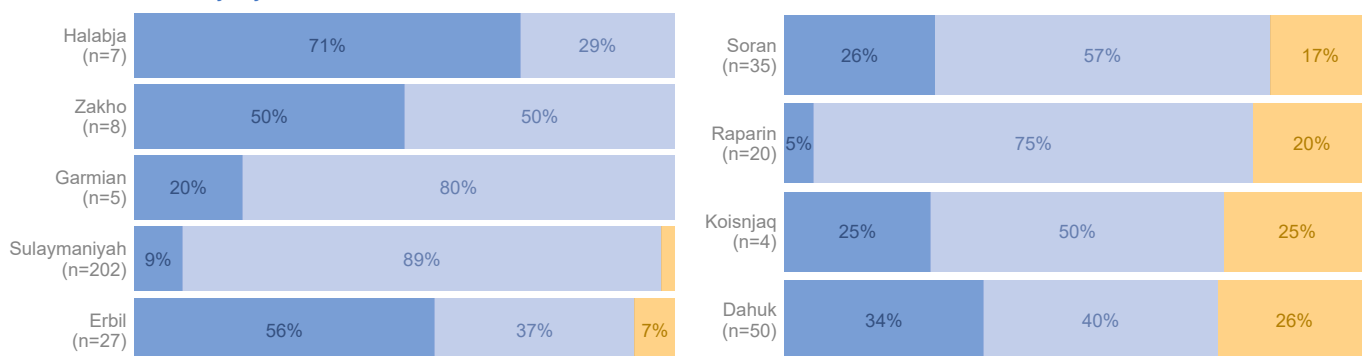


## Main barriers impeding service delivery by DoH



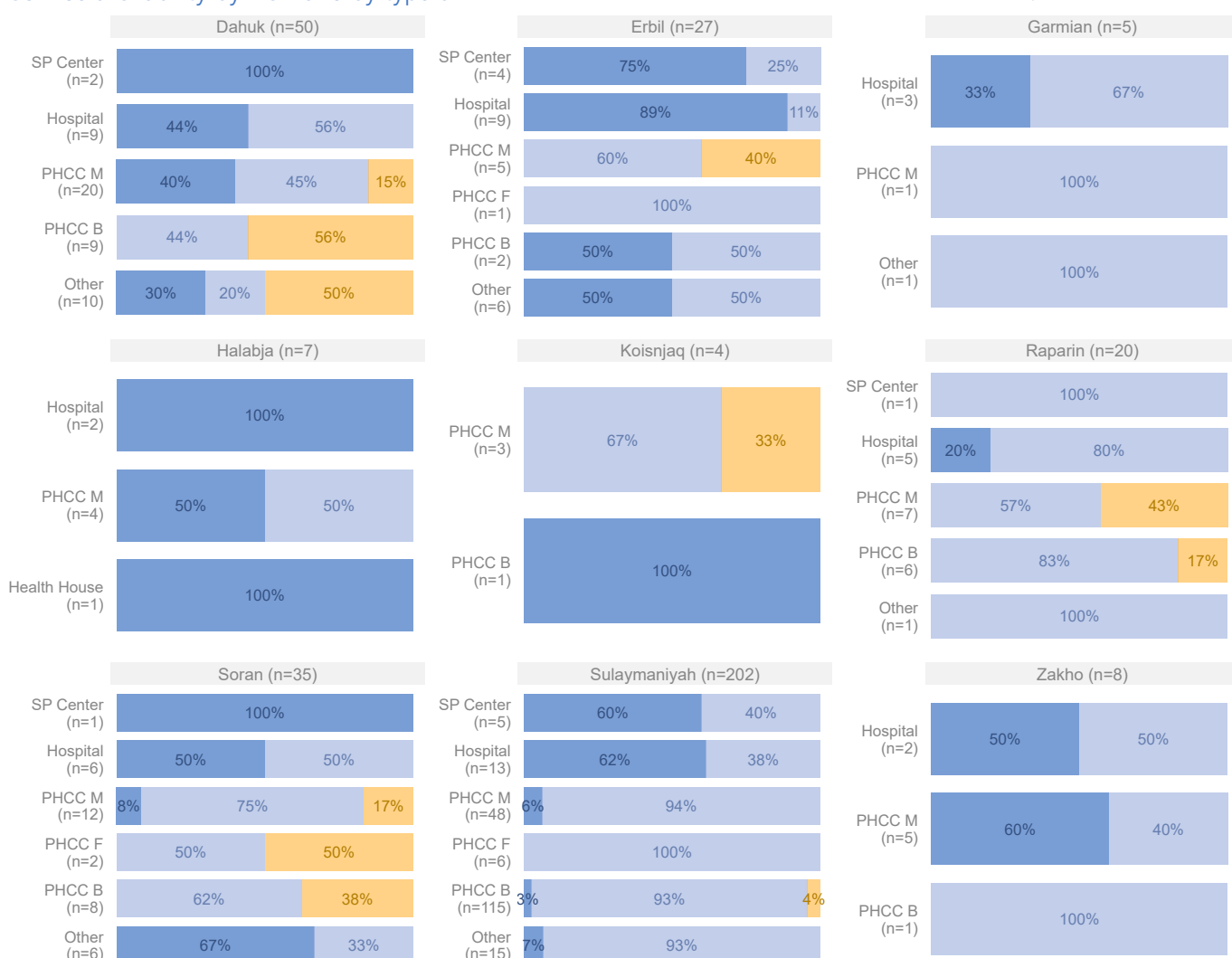
## Service availability by DoH\*

Available Partially available Not available



## Service availability by DoH and by type of HF\*

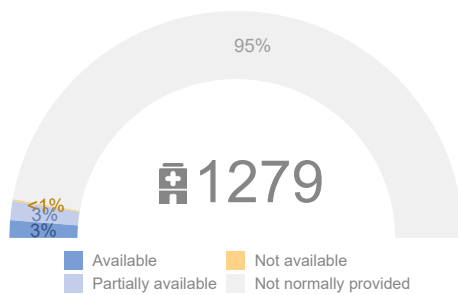
Available Partially available Not available



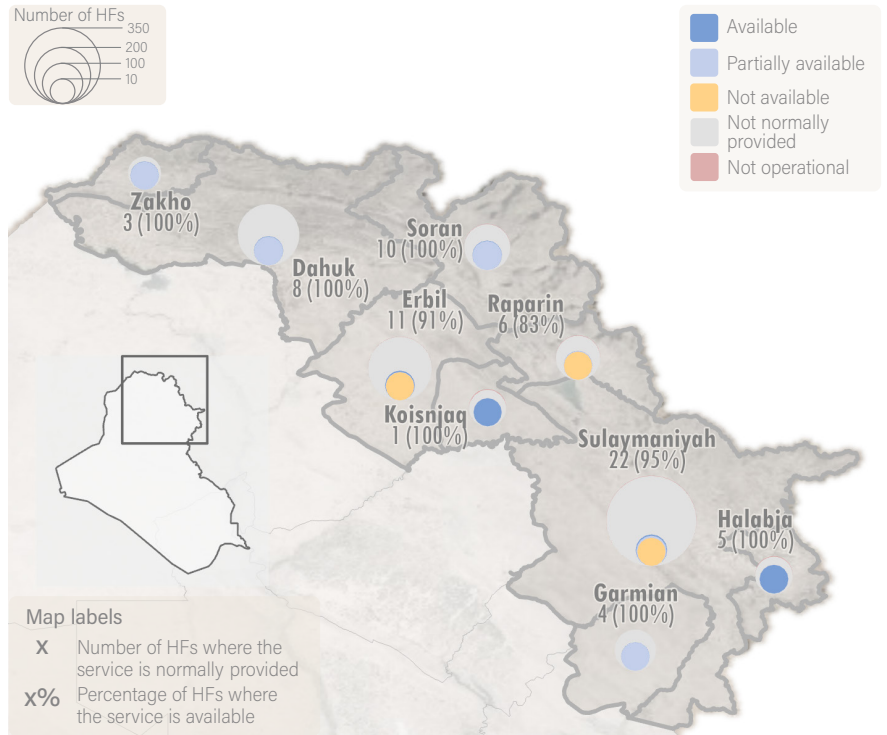
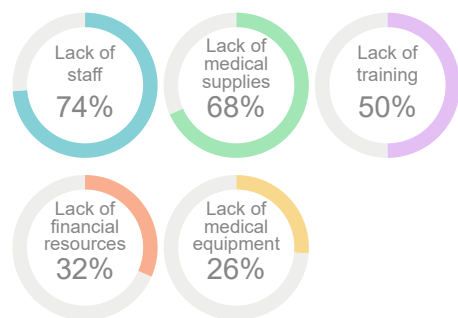
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# ADVANCED SYNDROME-BASED MANAGEMENT

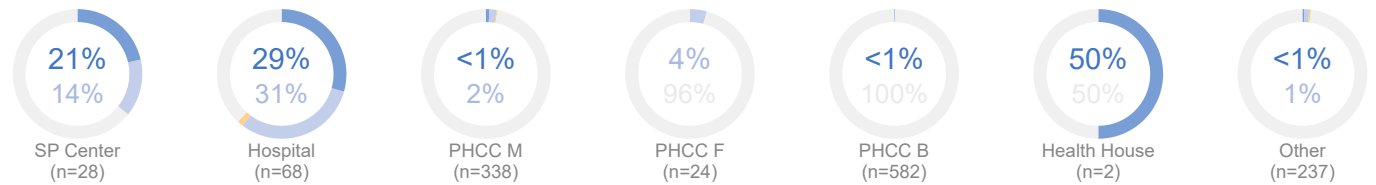
## Service availability



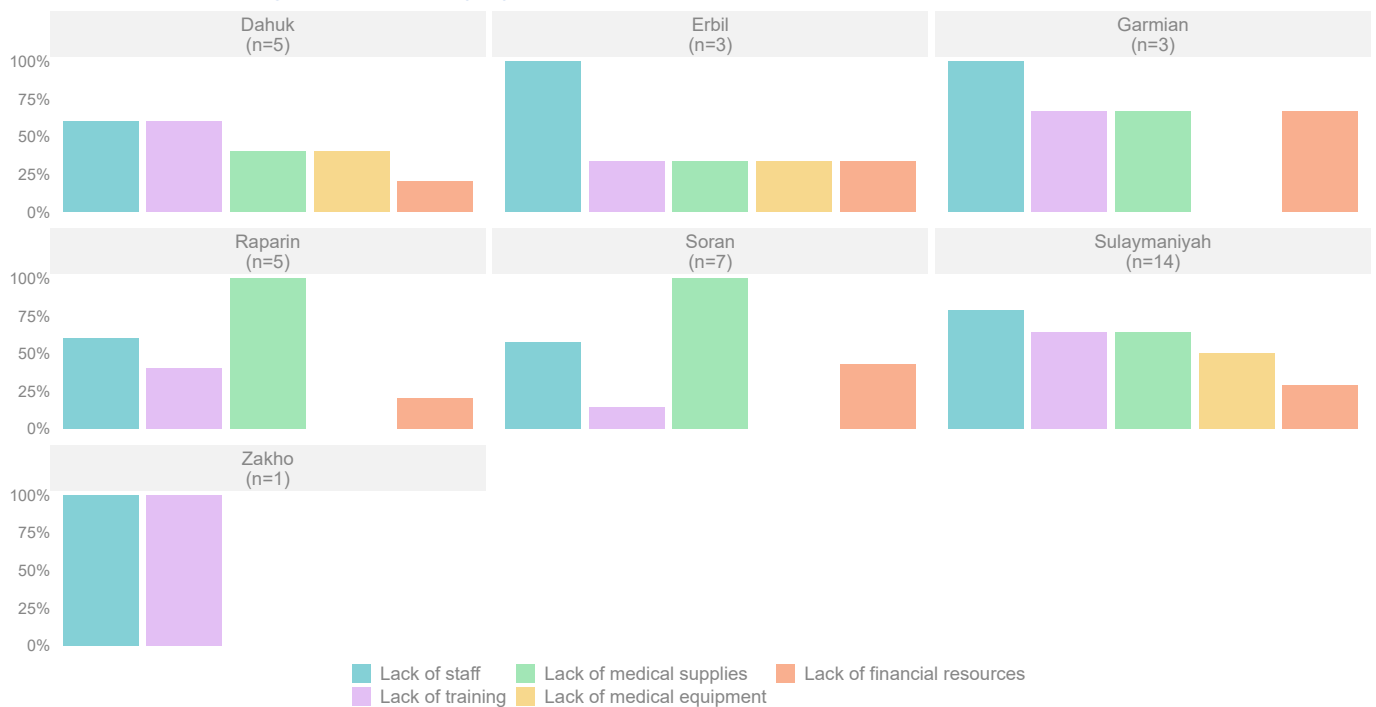
## Main barriers impeding service delivery n = 38



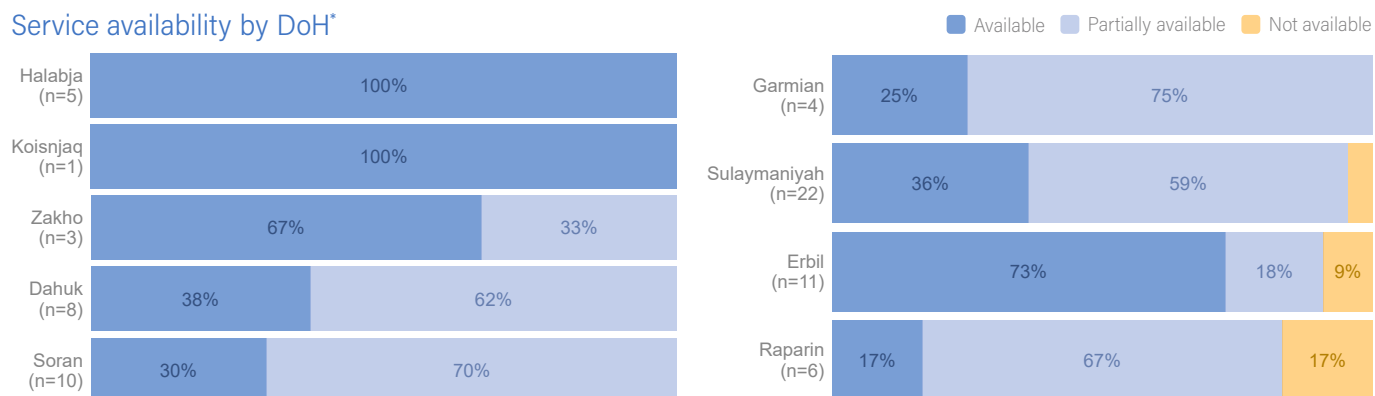
## Service availability by type of HF



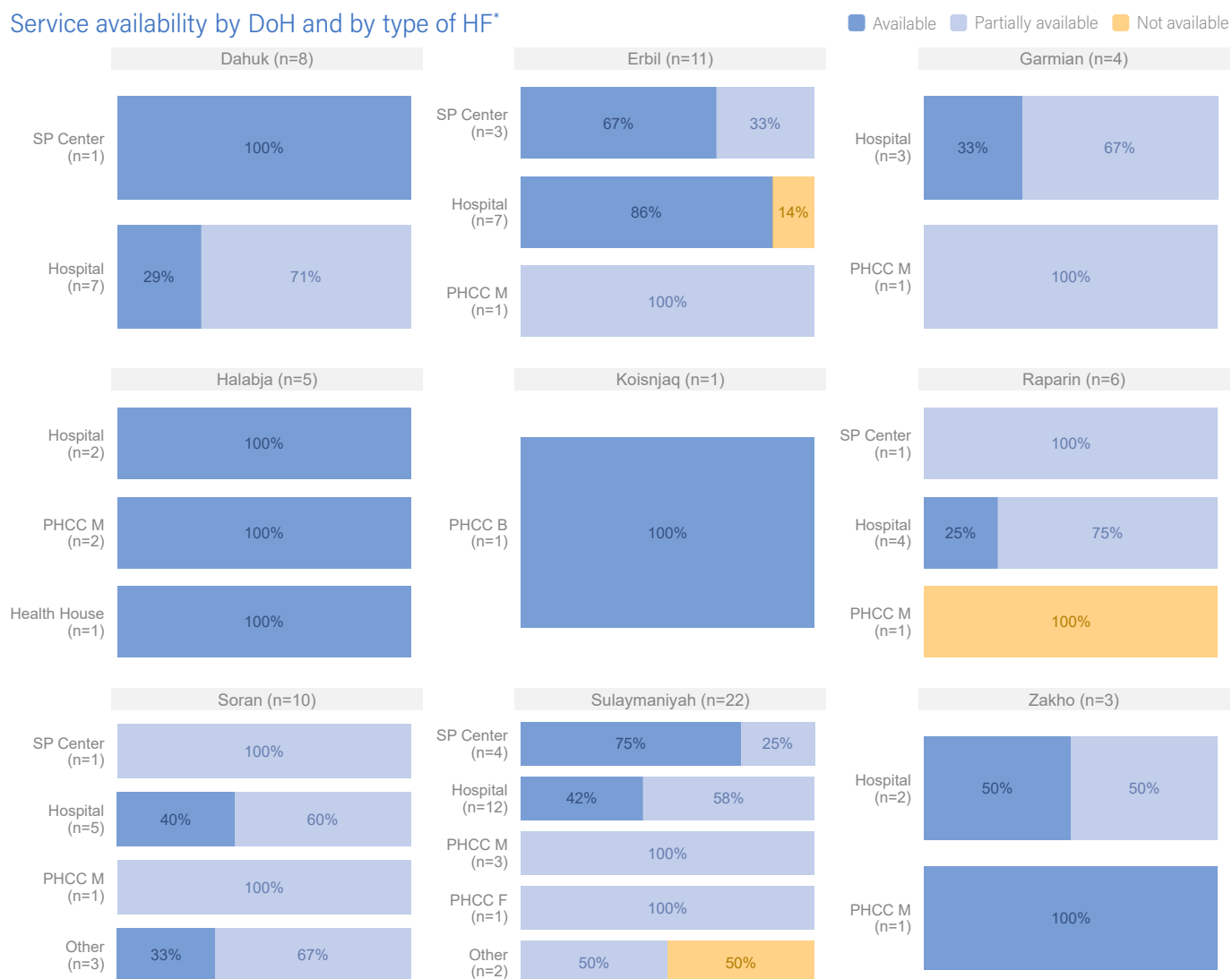
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



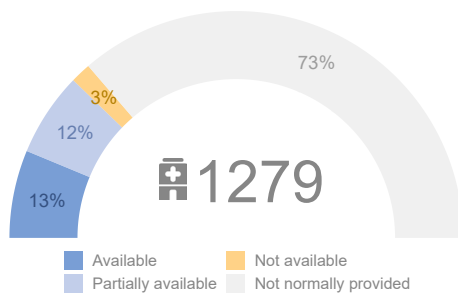
## Service availability by DoH and by type of HF\*



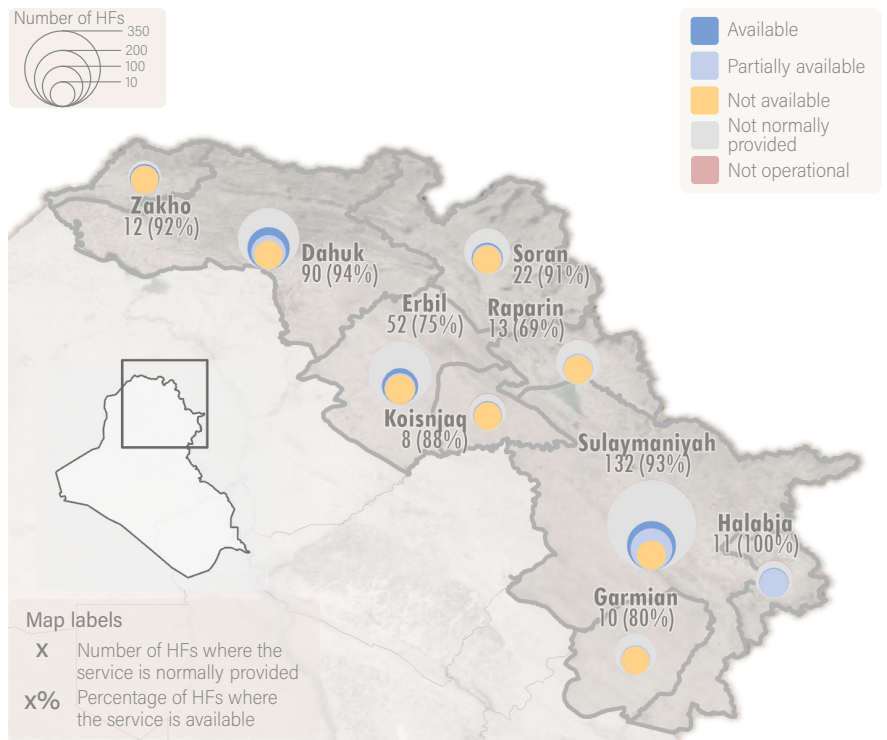
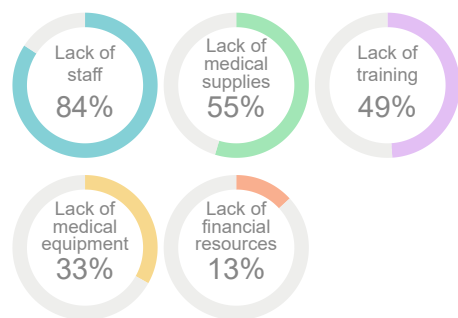
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# MONITORED REFERRAL

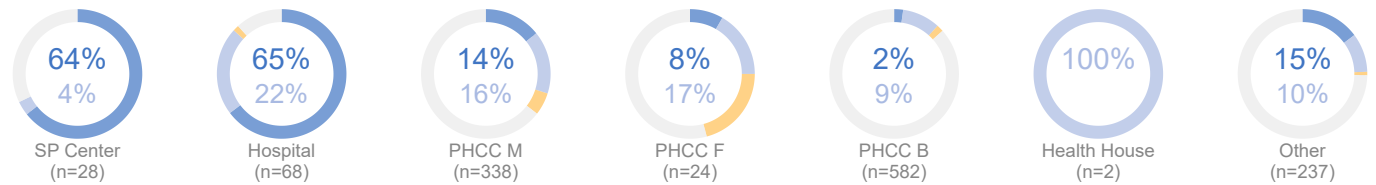
## Service availability



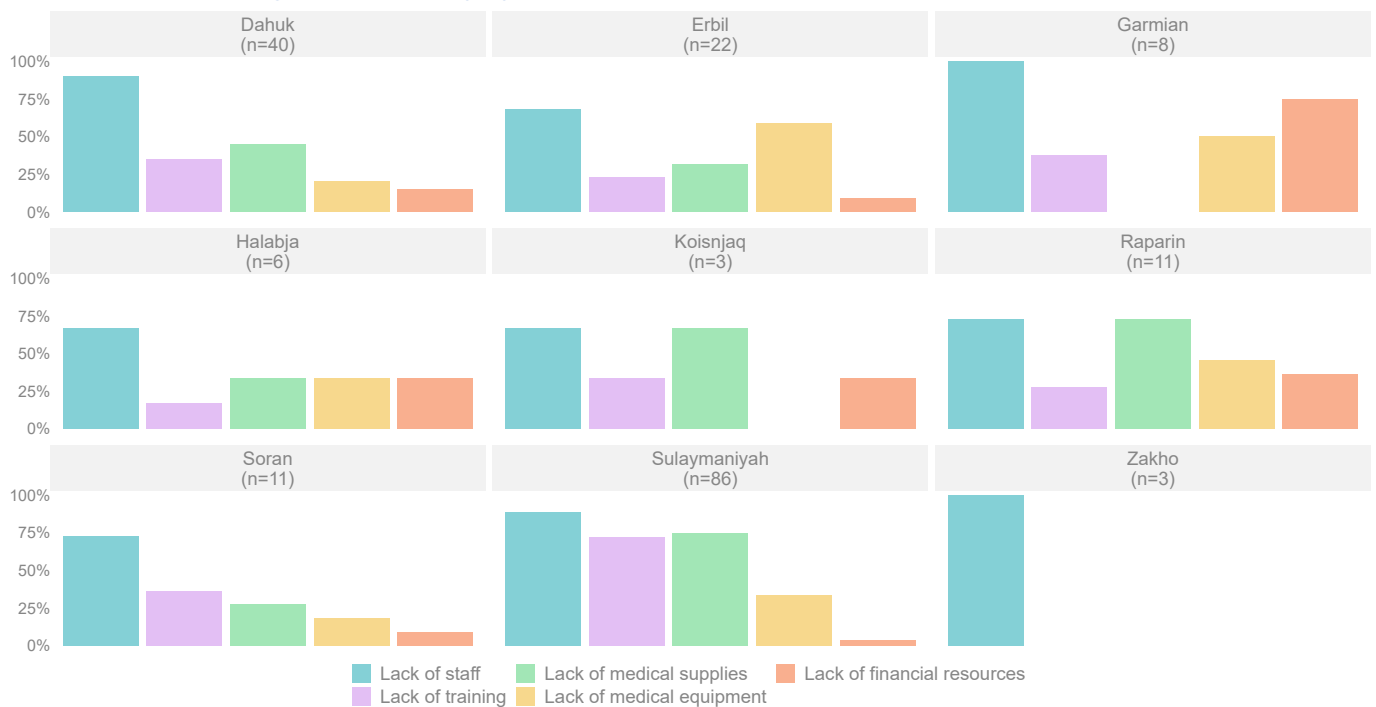
## Main barriers impeding service delivery n = 190



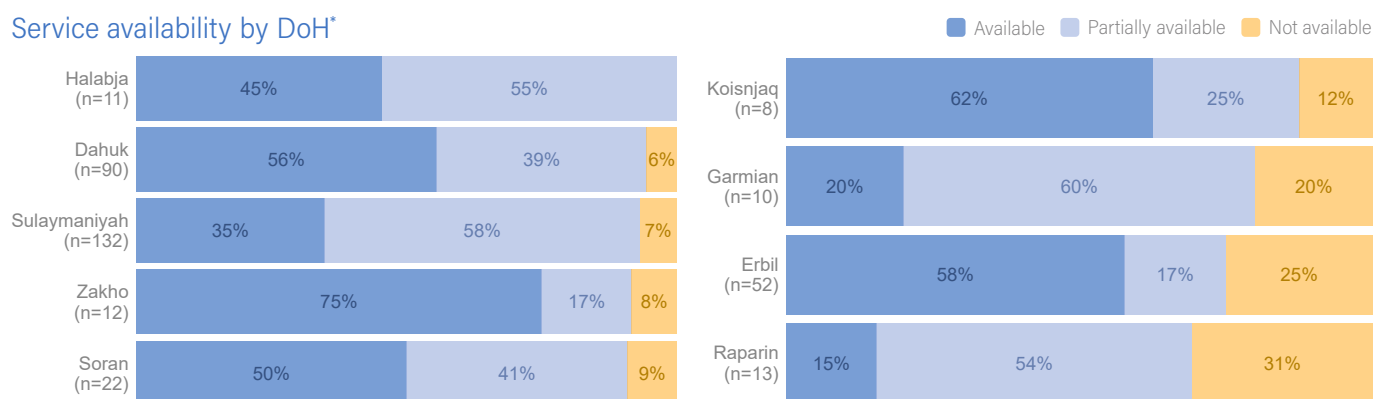
## Service availability by type of HF



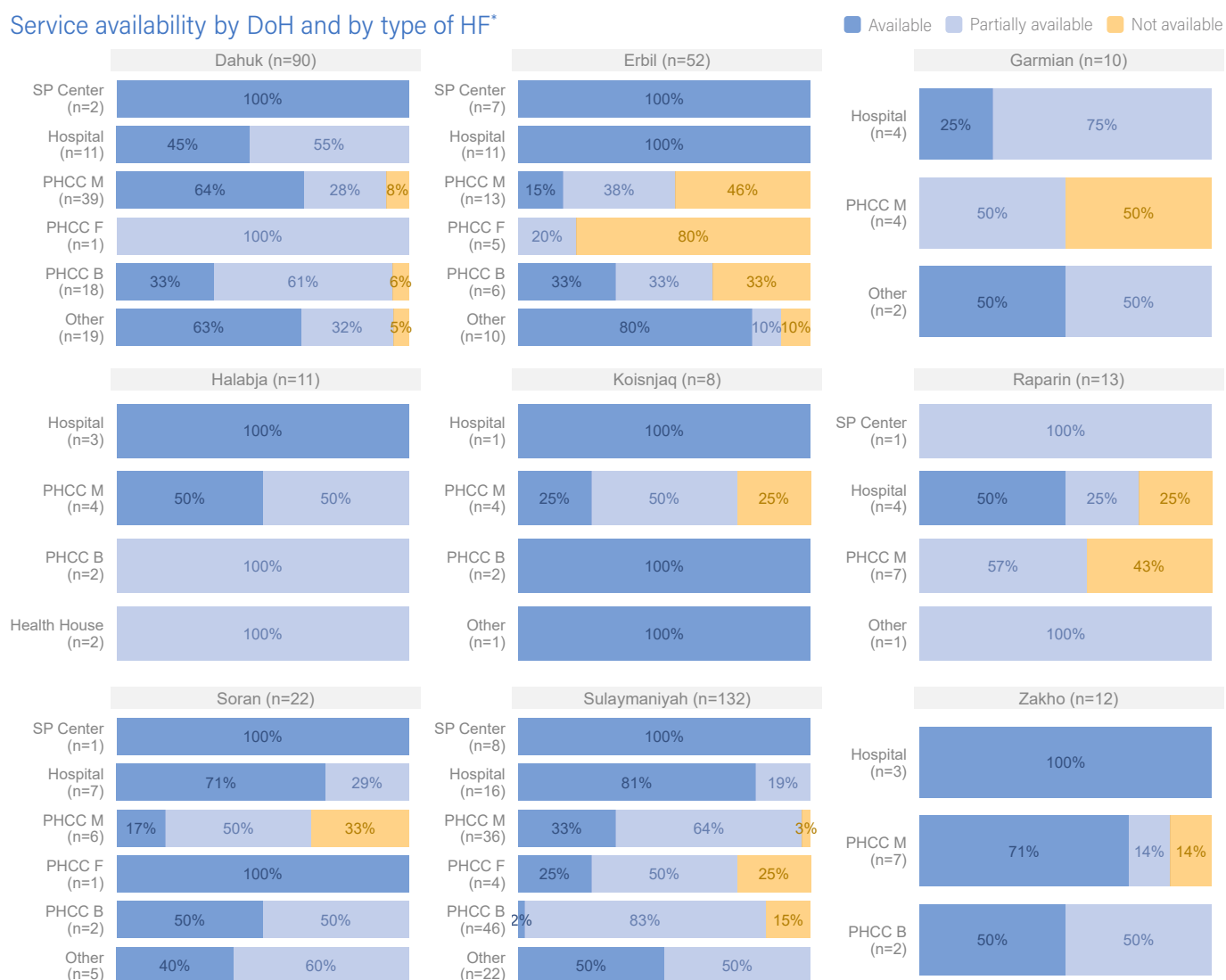
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



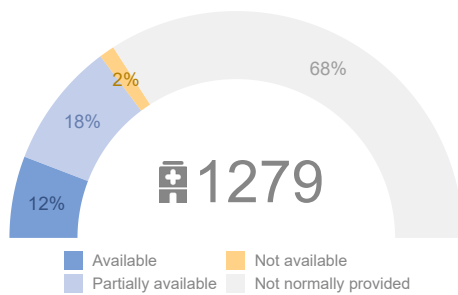
## Service availability by DoH and by type of HF\*



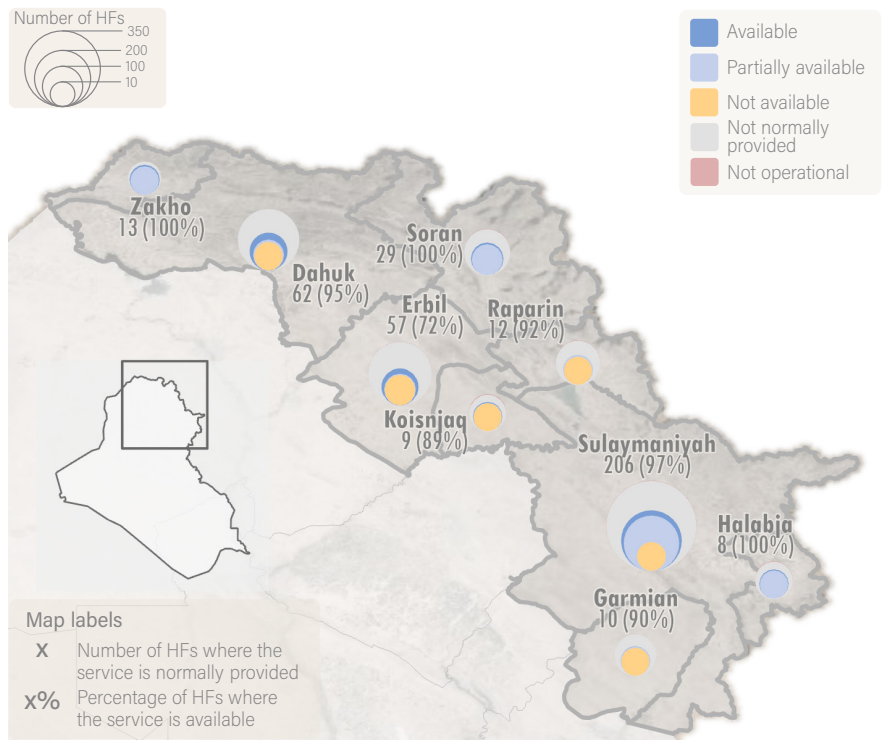
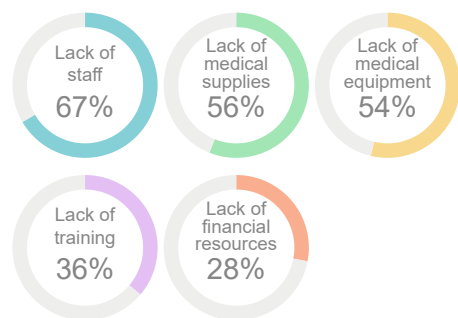
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# REFERRAL CAPACITY

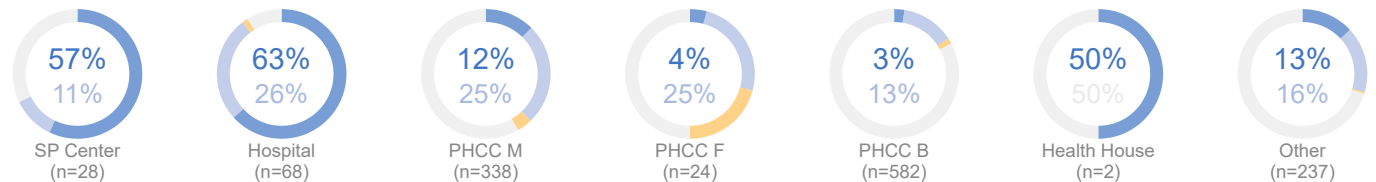
## Service availability



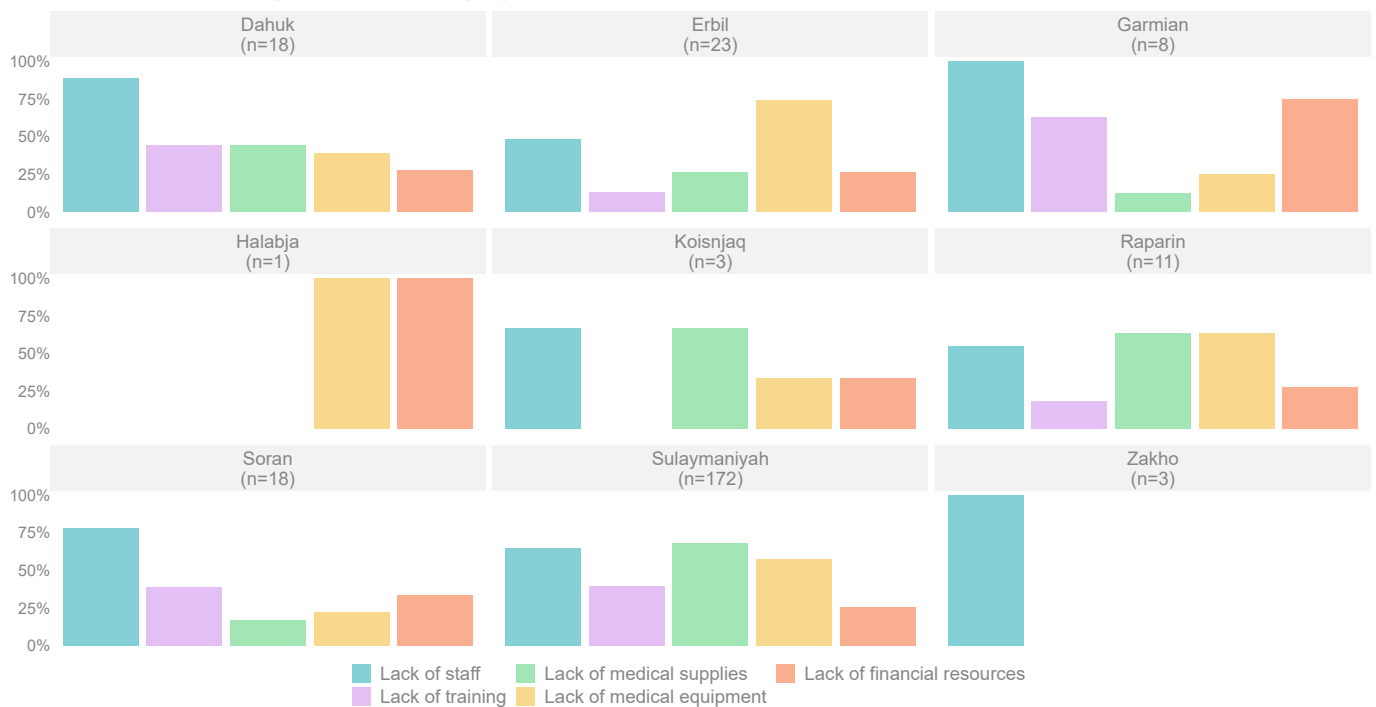
## Main barriers impeding service delivery n = 257



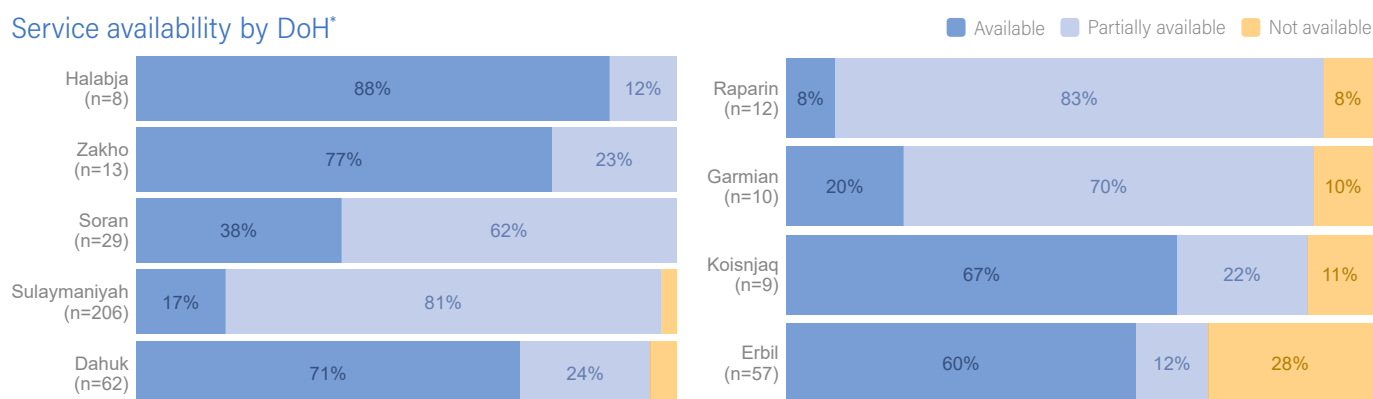
## Service availability by type of HF



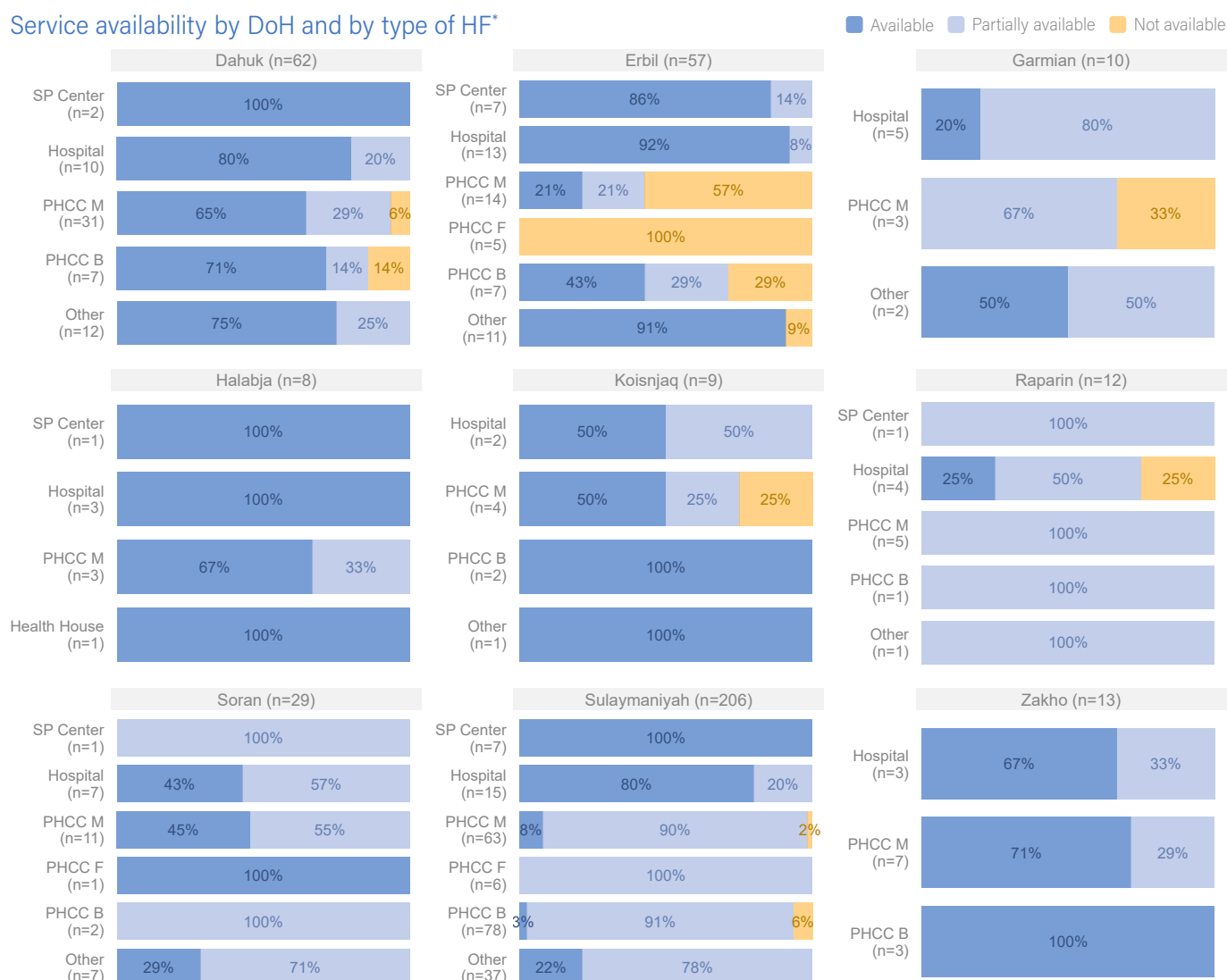
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



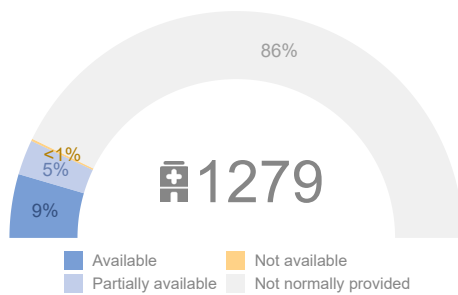
## Service availability by DoH and by type of HF\*



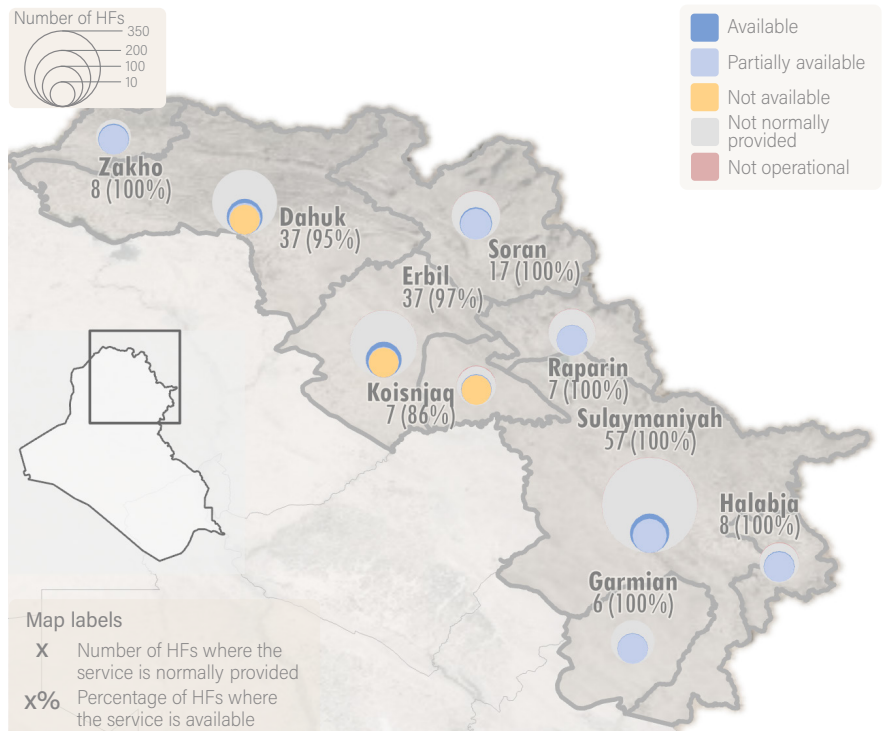
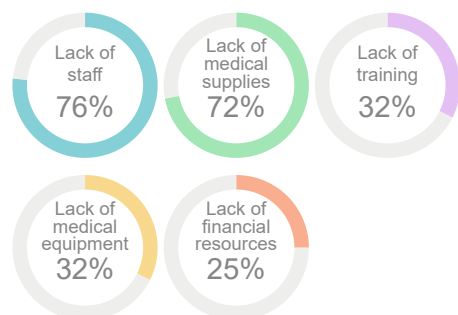
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# ACCEPTANCE OF REFERRALS

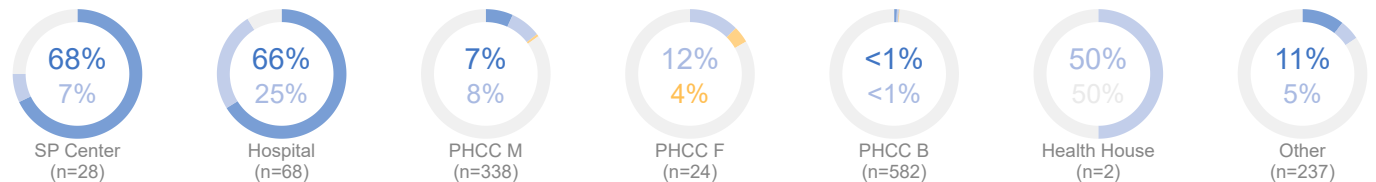
## Service availability



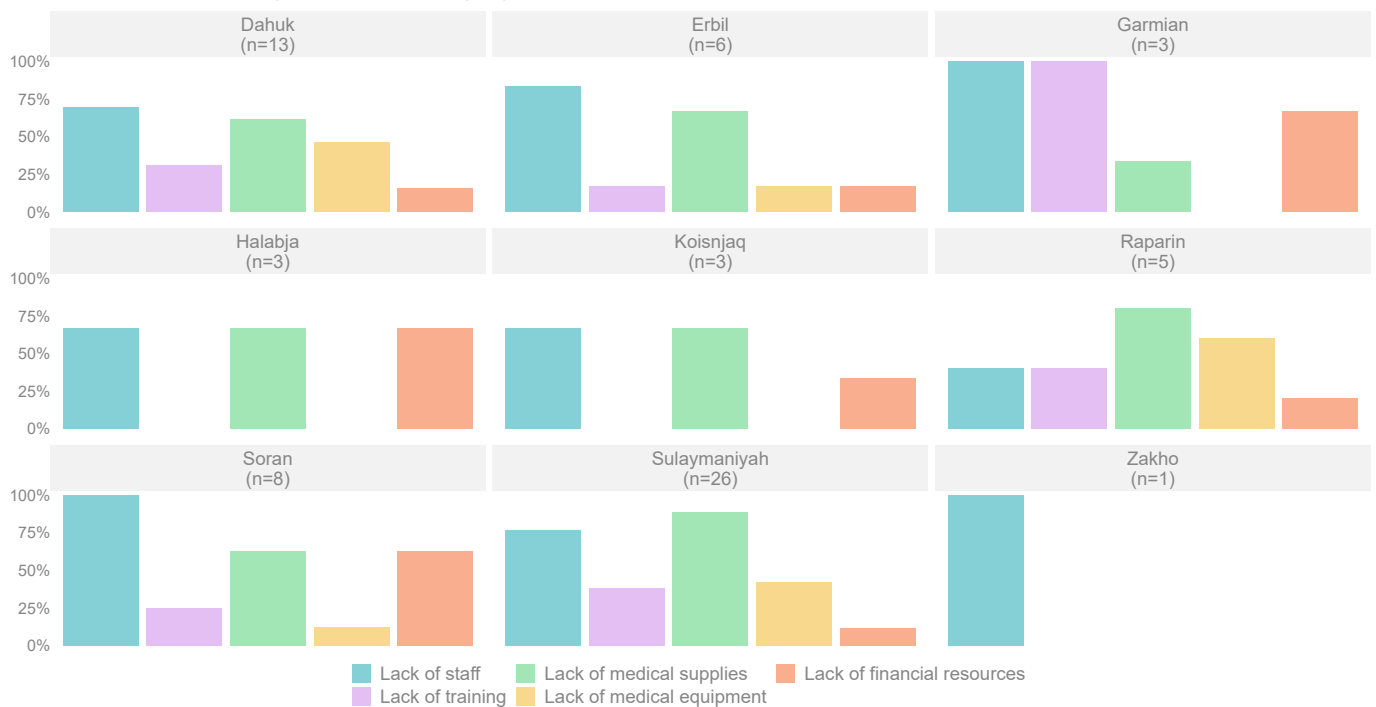
## Main barriers impeding service delivery n = 68



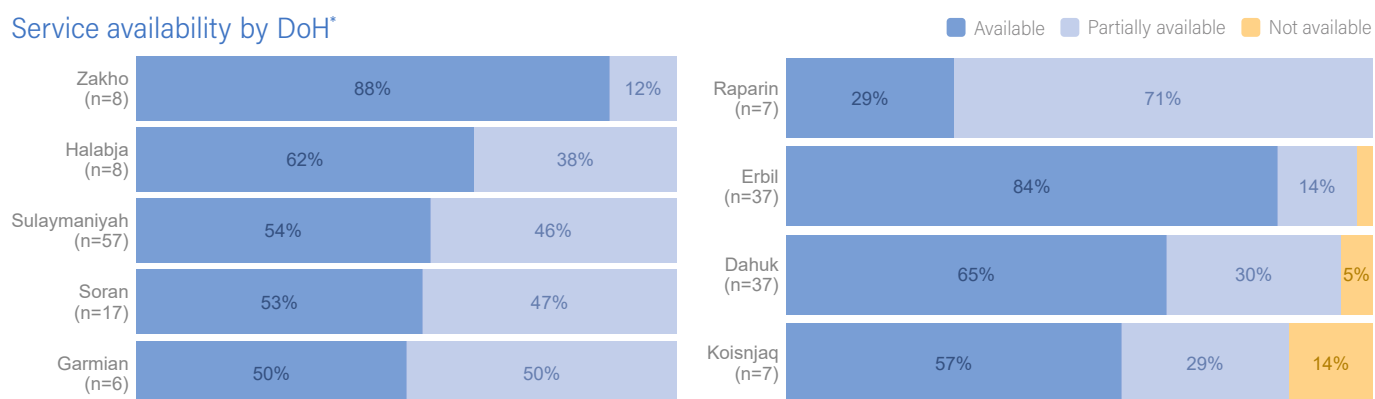
## Service availability by type of HF



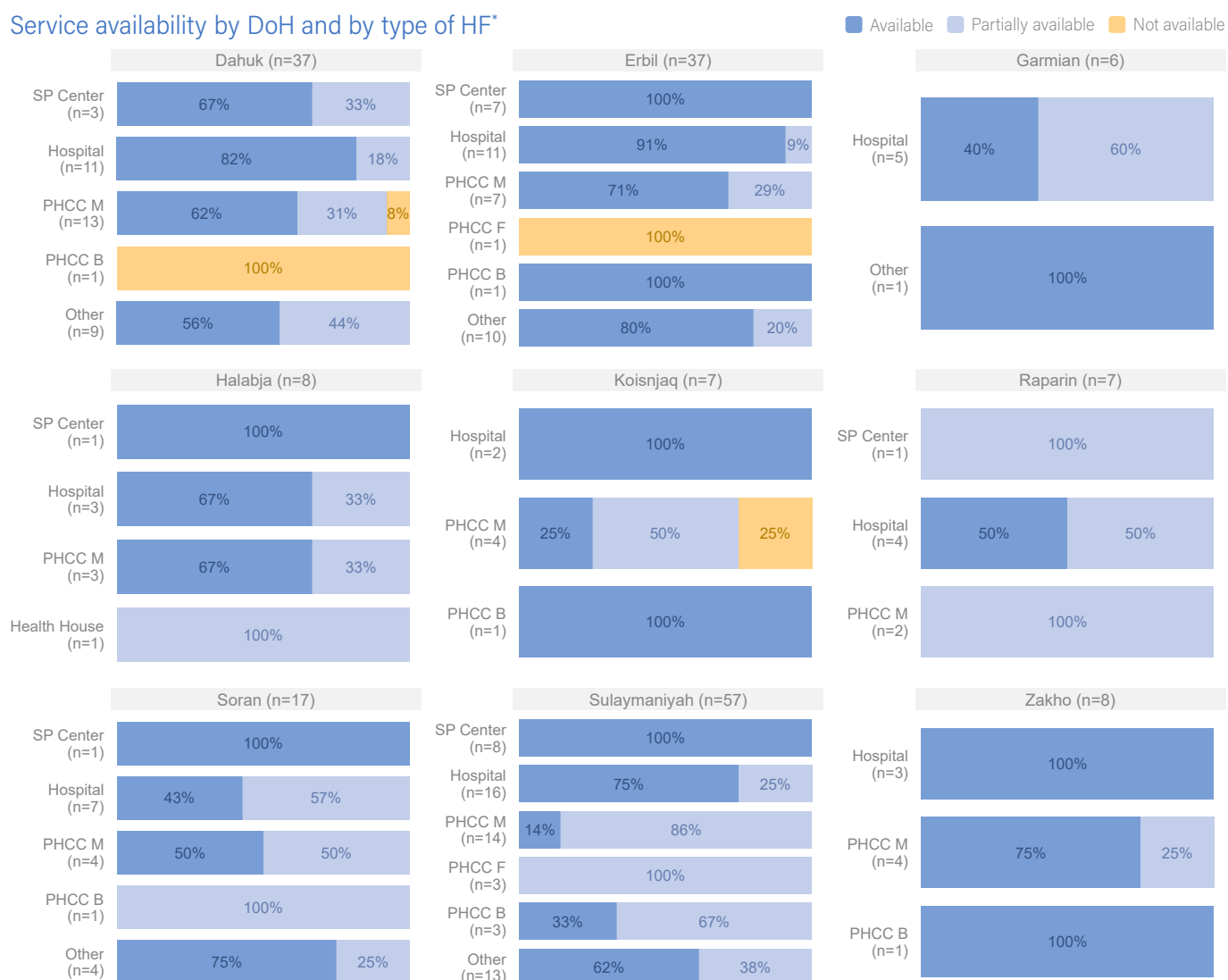
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



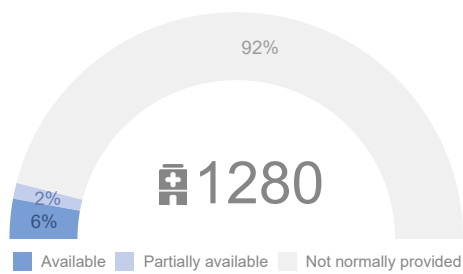
## Service availability by DoH and by type of HF\*



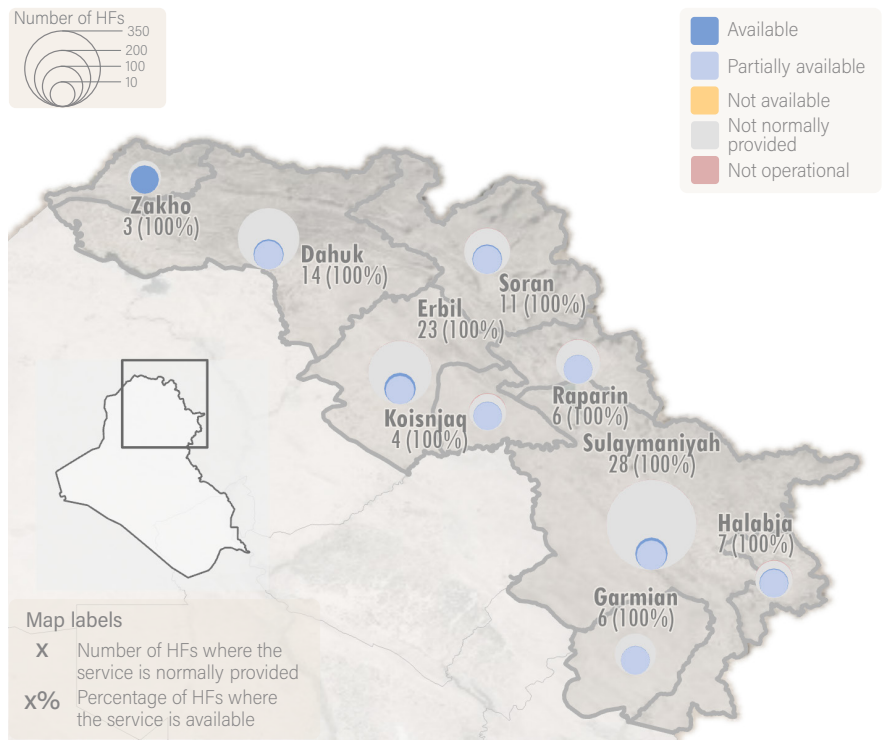
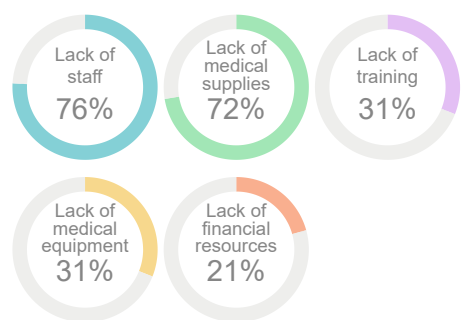
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# ACCEPTANCE OF COMPLEX REFERRALS

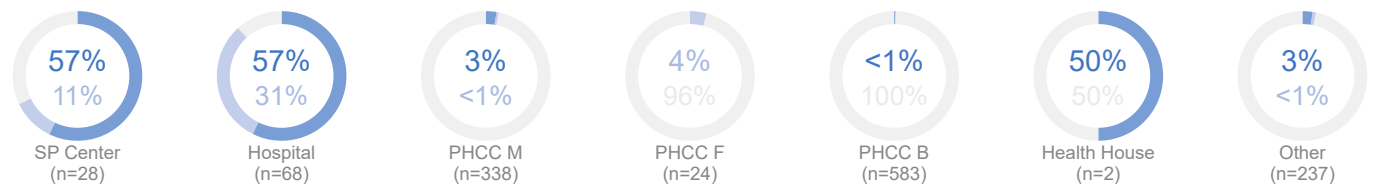
## Service availability



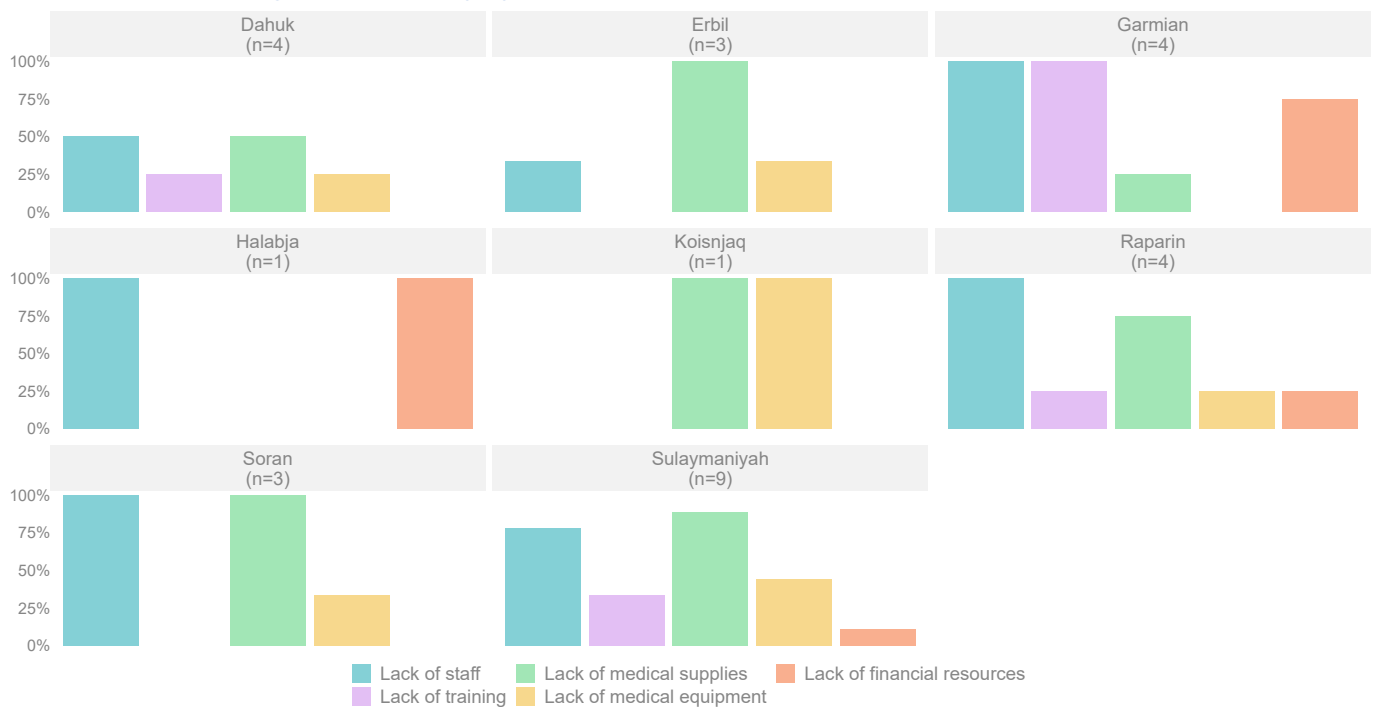
## Main barriers impeding service delivery n = 29



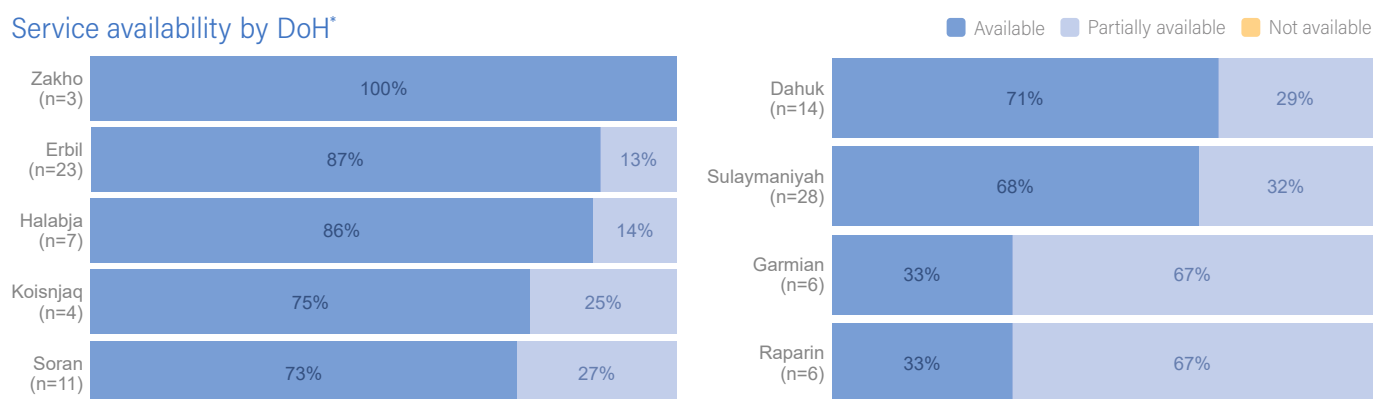
## Service availability by type of HF



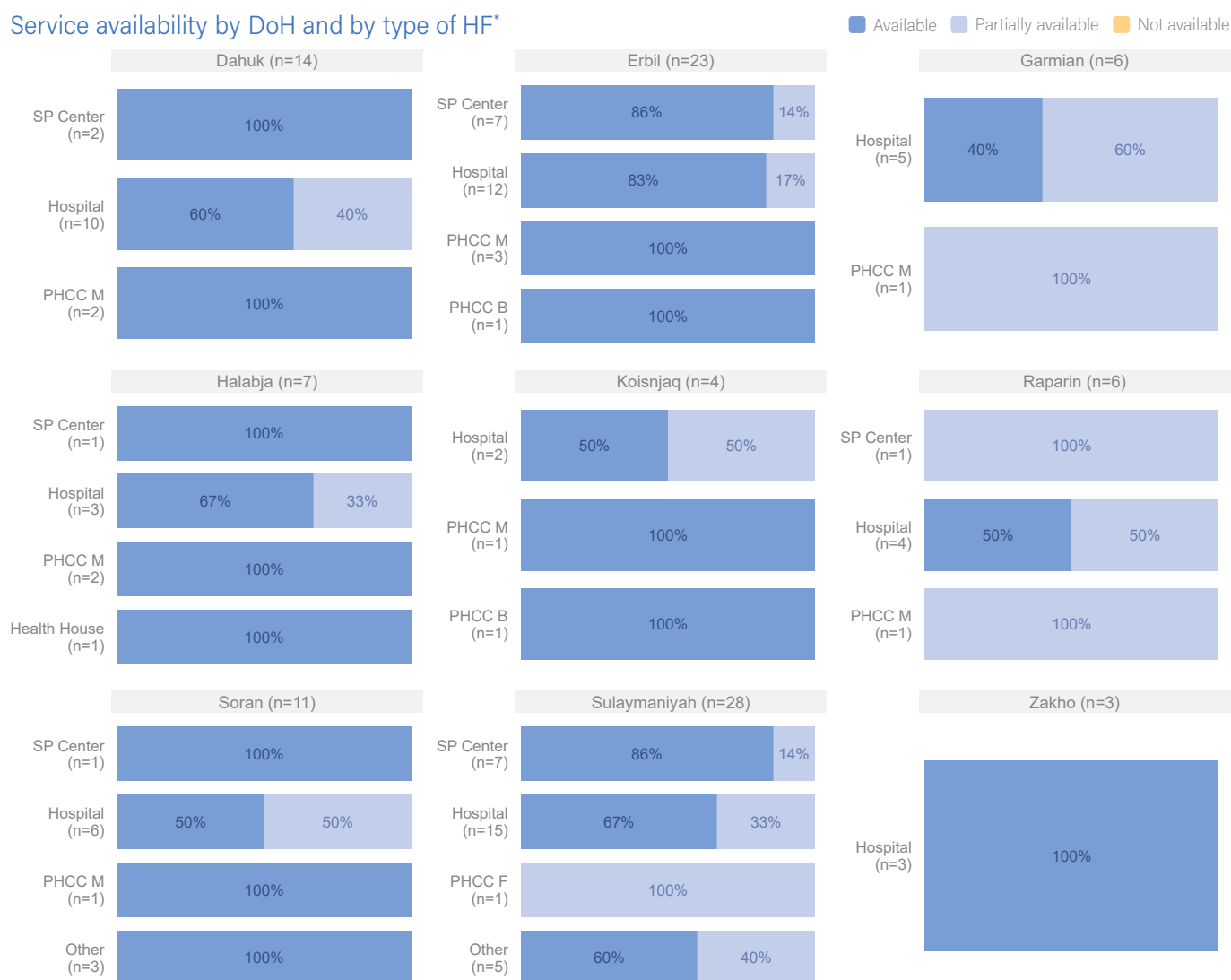
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



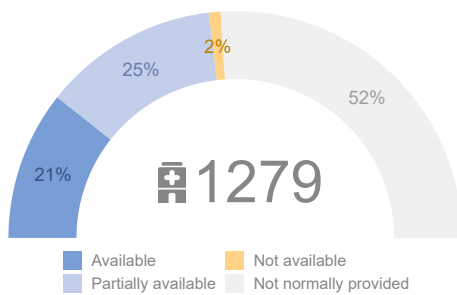
## Service availability by DoH and by type of HF\*



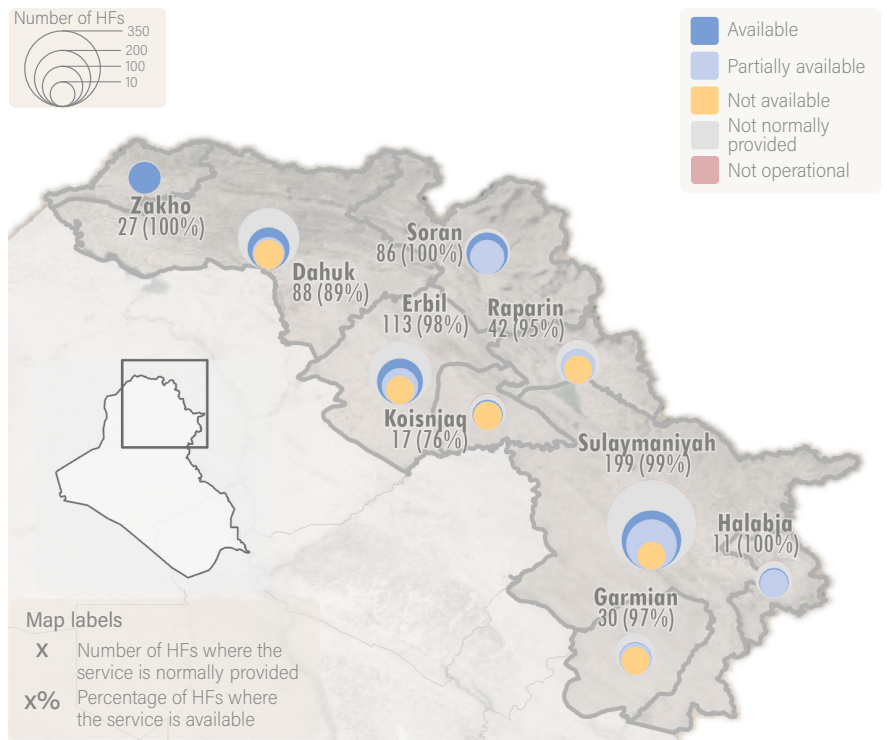
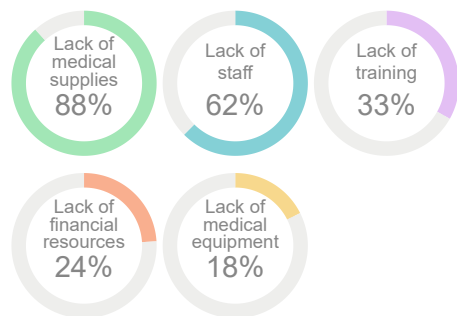
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# OUTPATIENT SERVICES FOR PRIMARY CARE

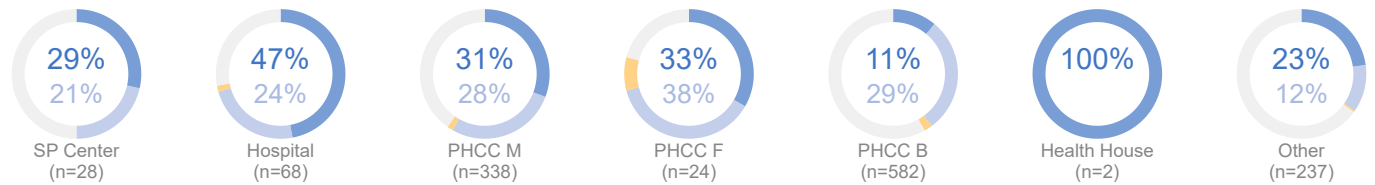
## Service availability



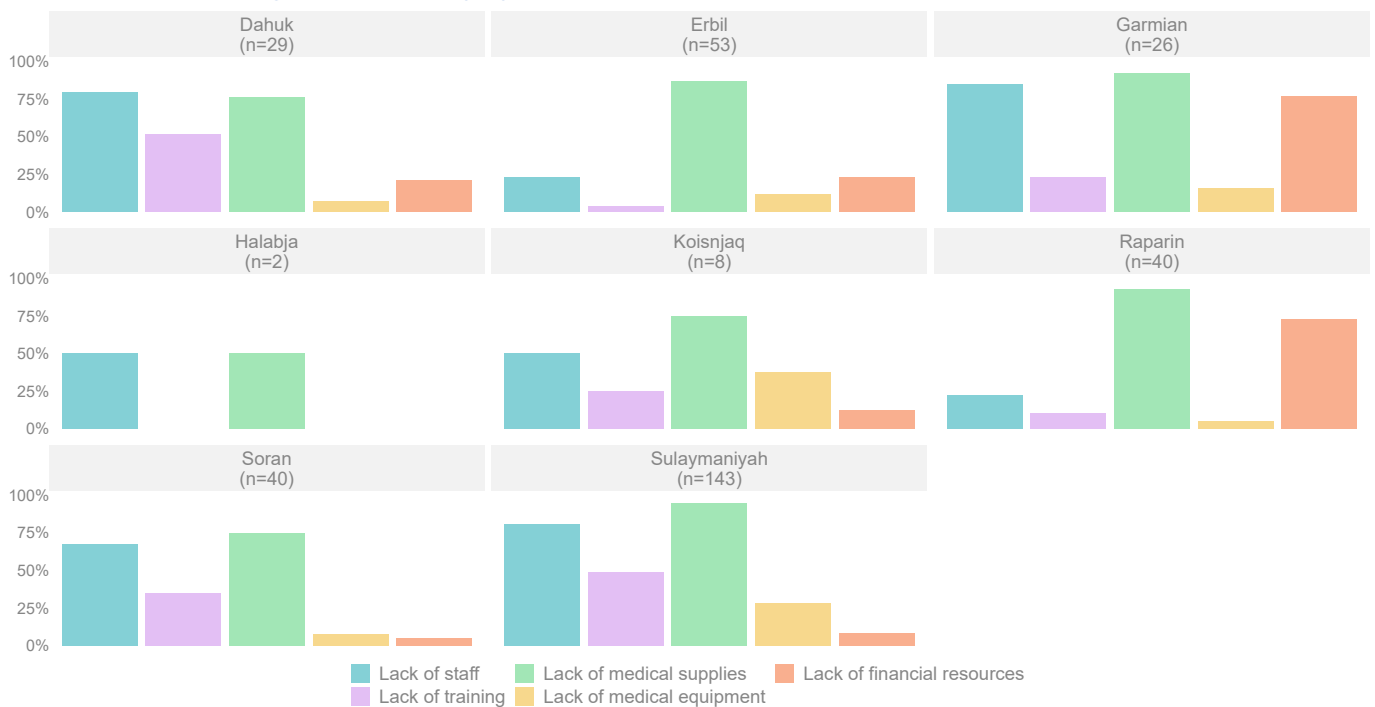
## Main barriers impeding service delivery n = 341



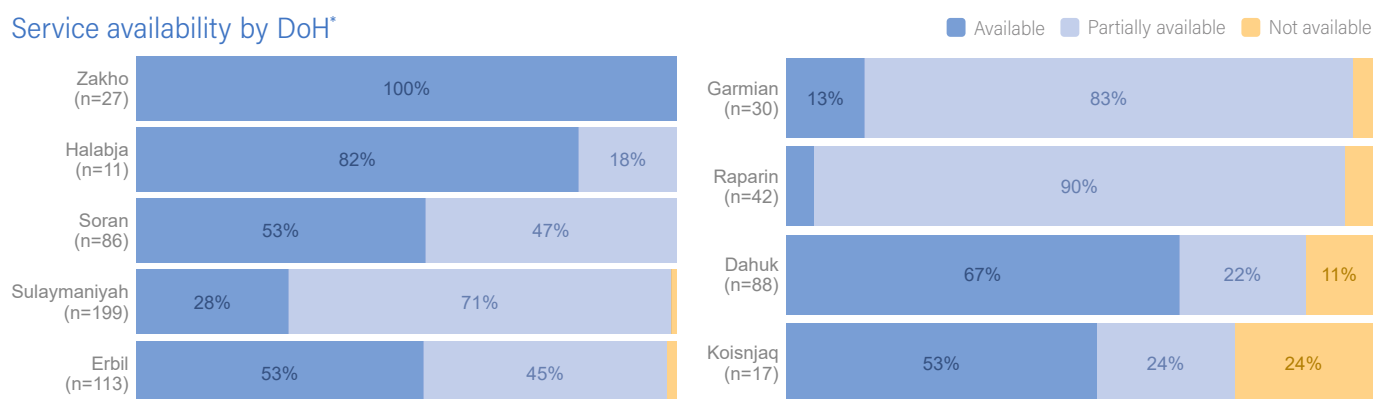
## Service availability by type of HF



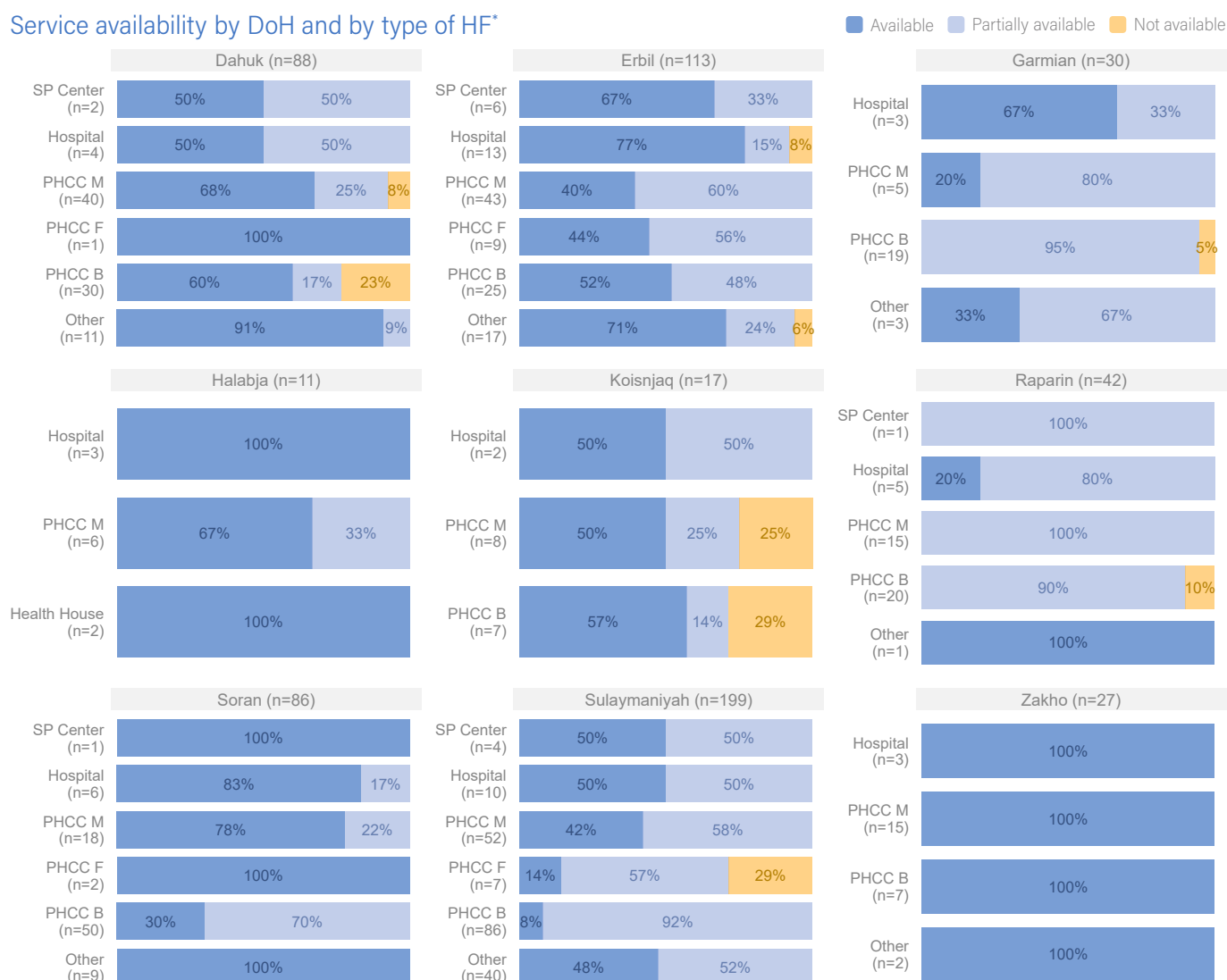
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



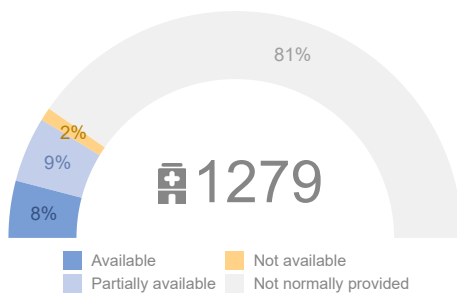
## Service availability by DoH and by type of HF\*



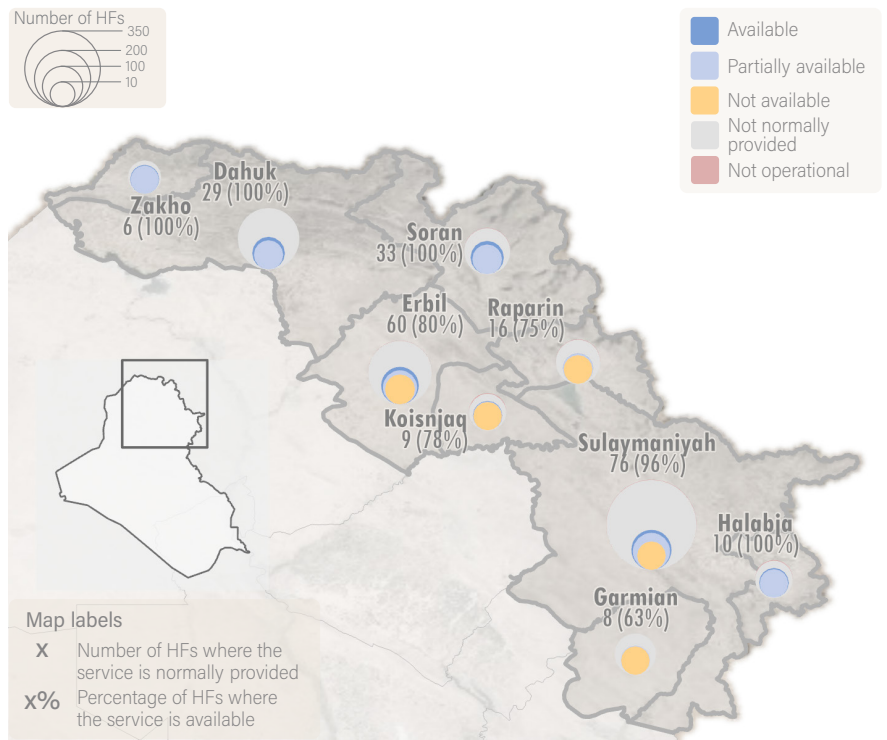
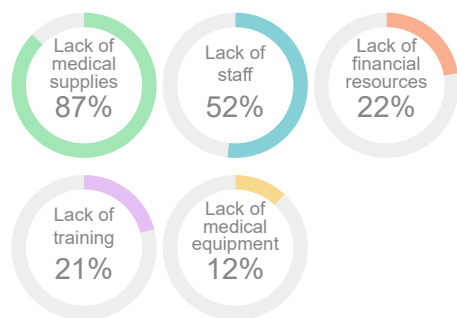
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# OUTPATIENT DEPARTMENT FOR SECONDARY CARE

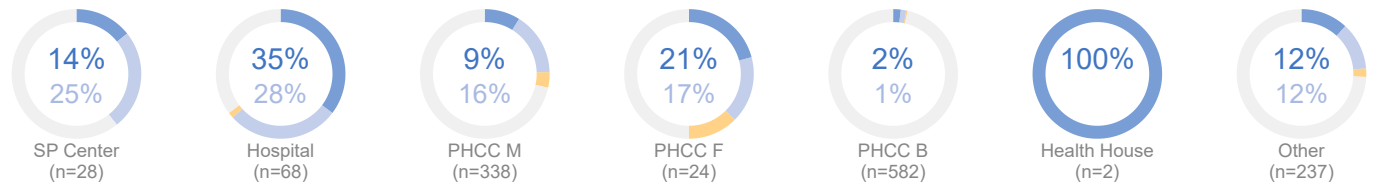
## Service availability



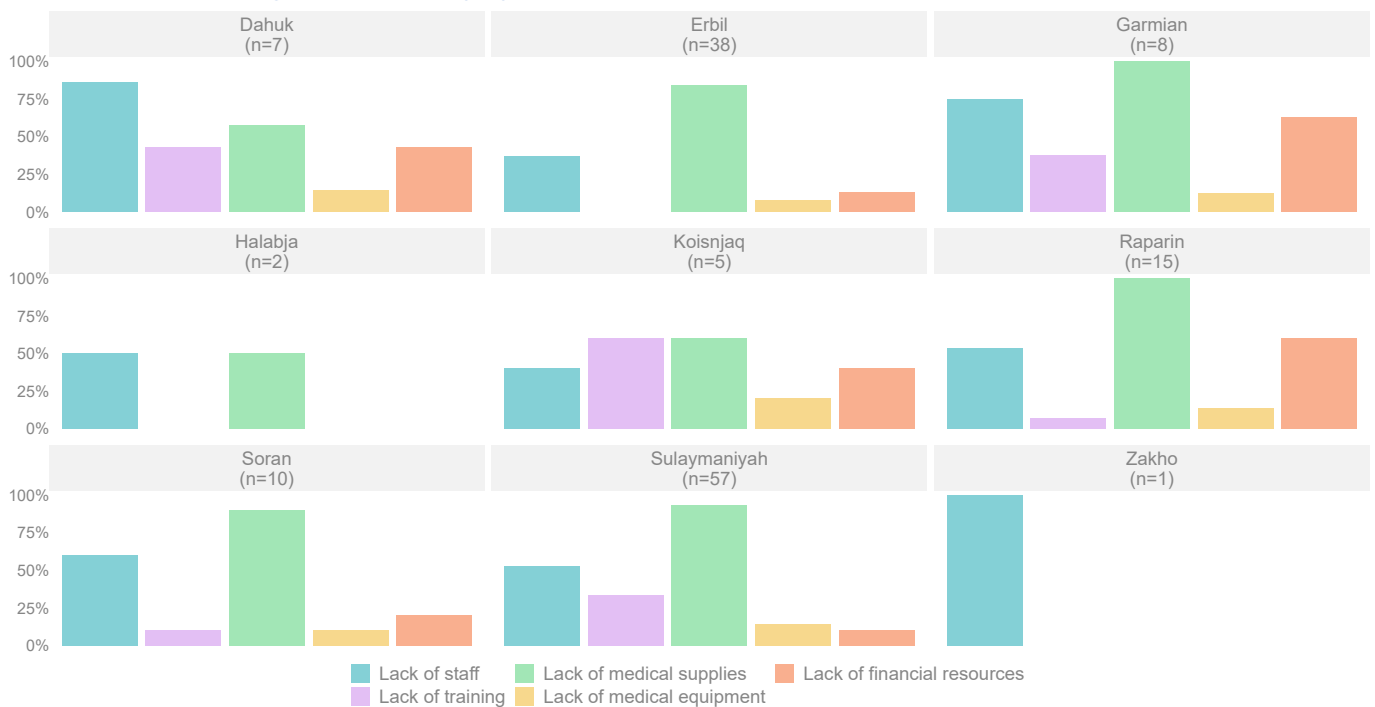
## Main barriers impeding service delivery n = 143



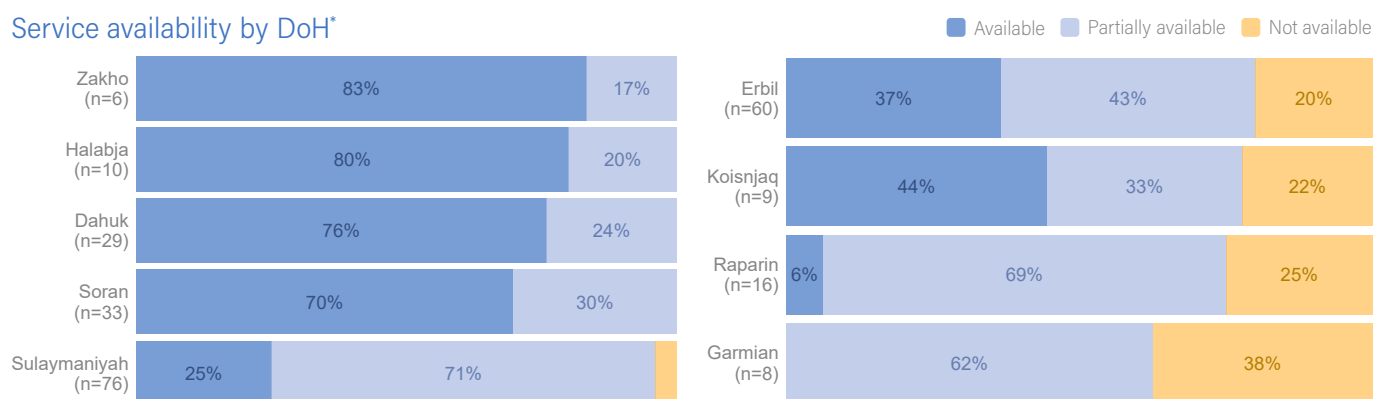
## Service availability by type of HF



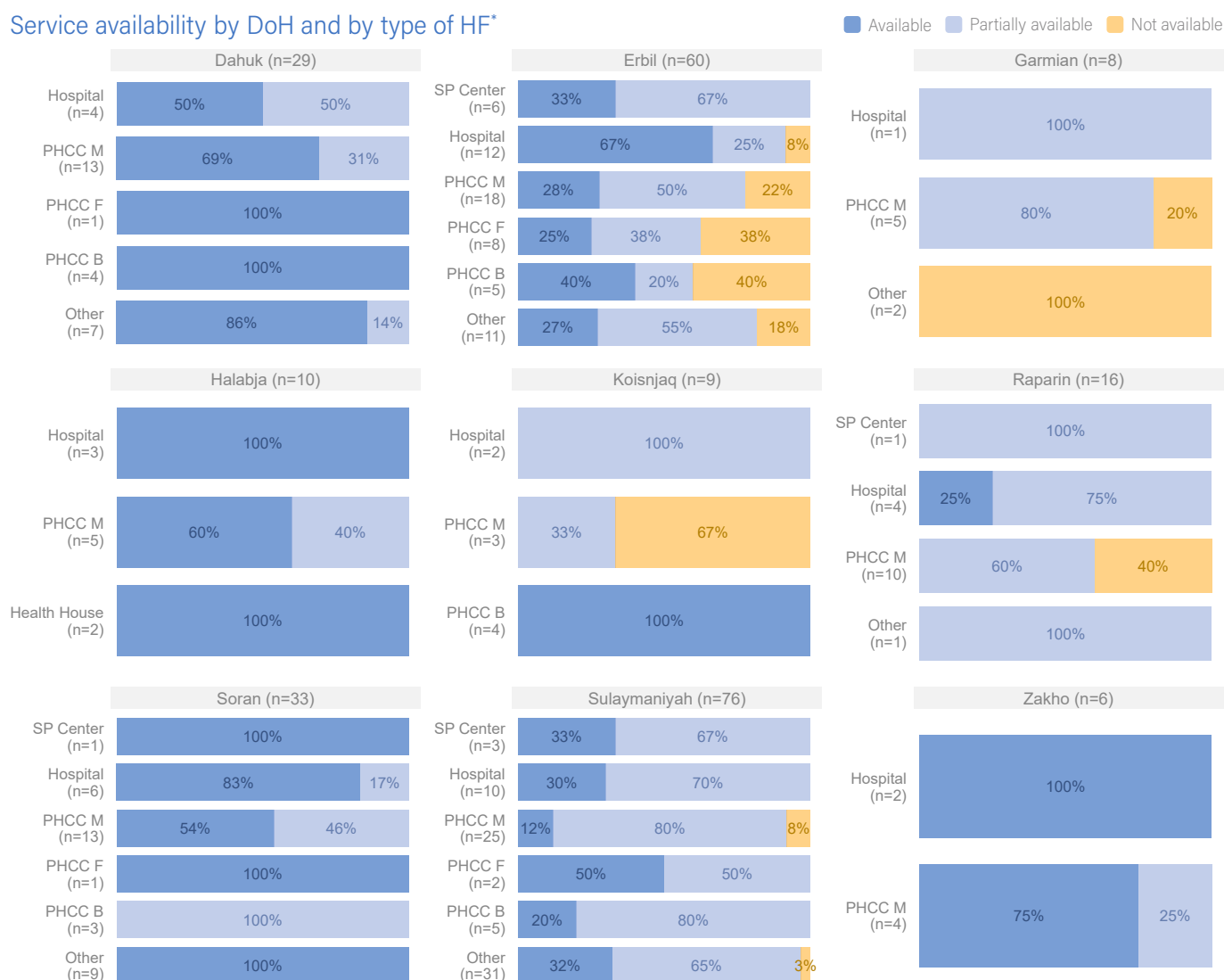
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



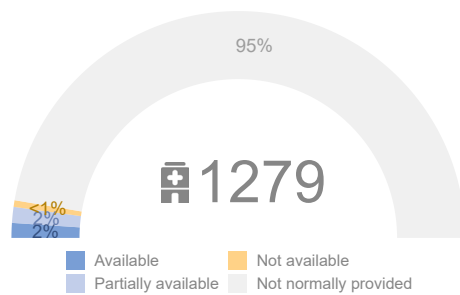
## Service availability by DoH and by type of HF\*



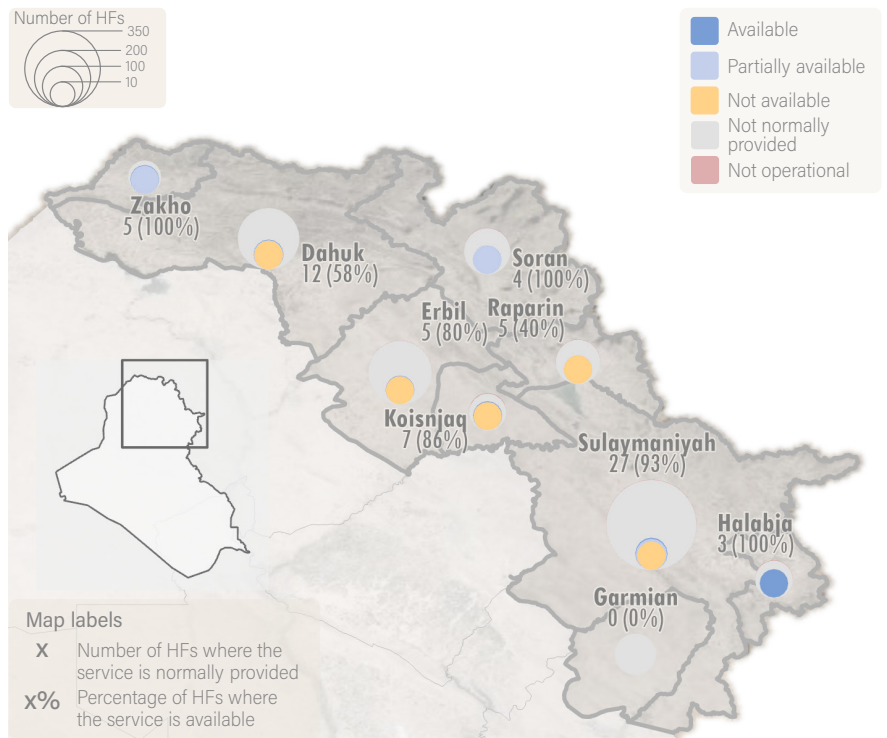
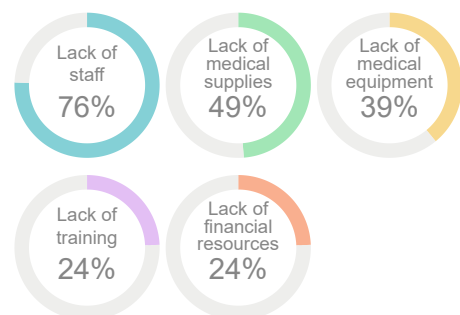
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# HOME VISITS

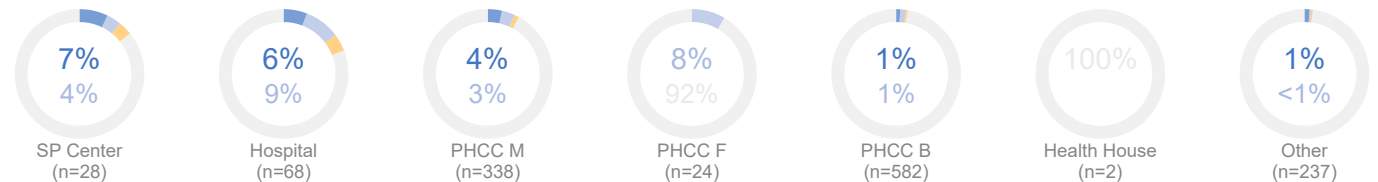
## Service availability



## Main barriers impeding service delivery n = 41



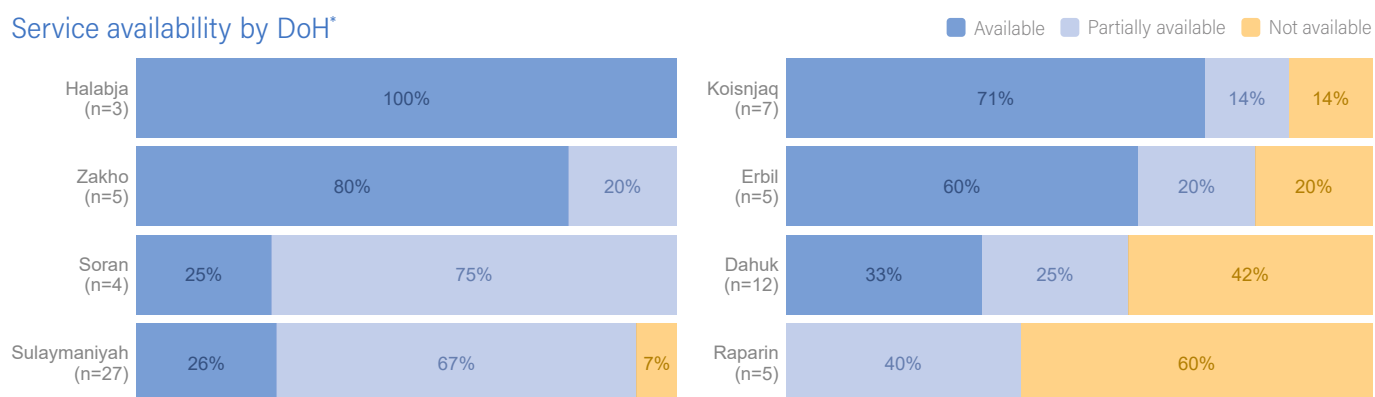
## Service availability by type of HF



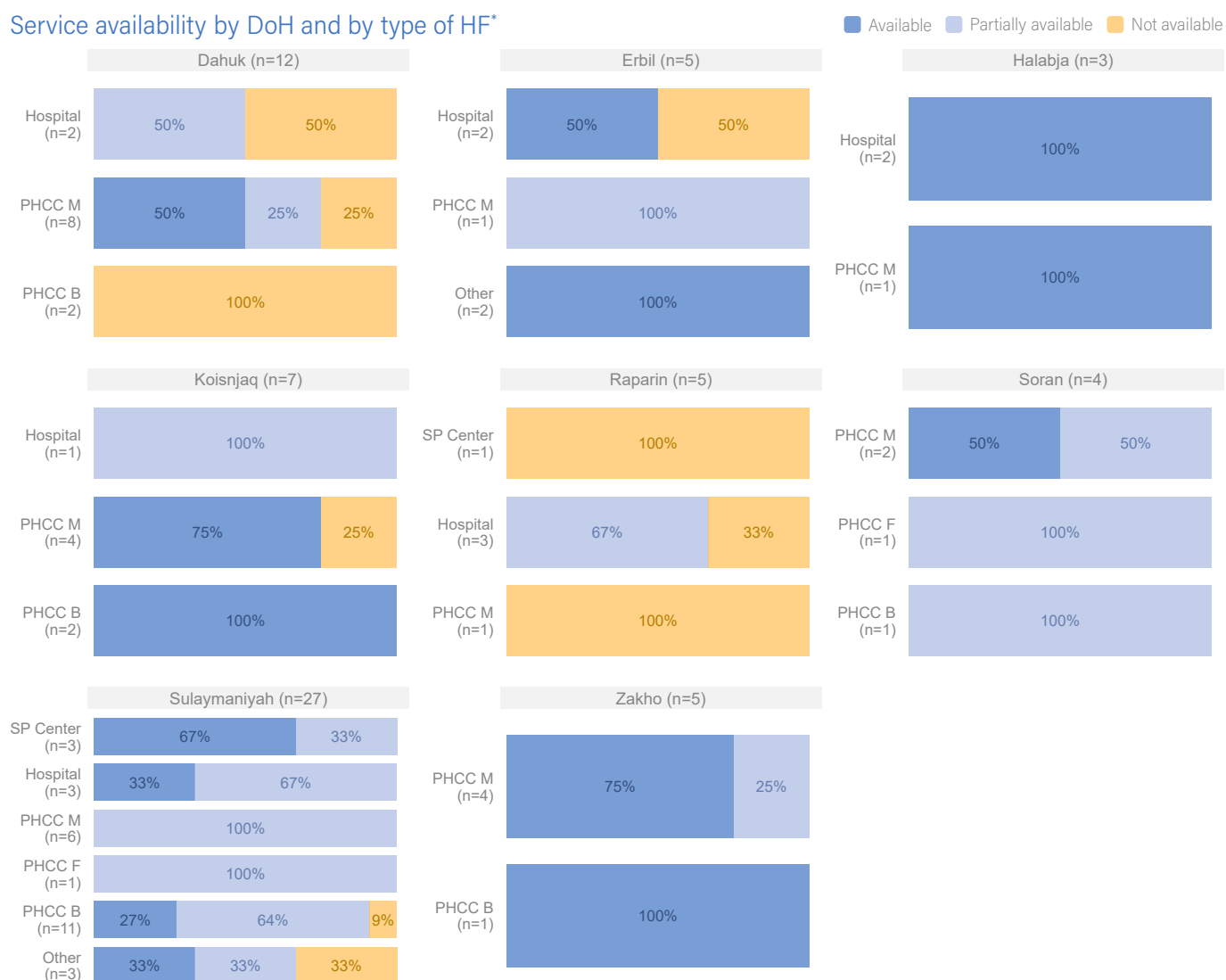
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



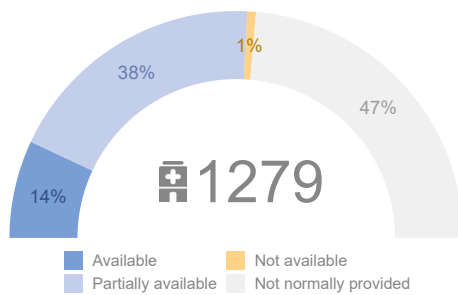
## Service availability by DoH and by type of HF\*



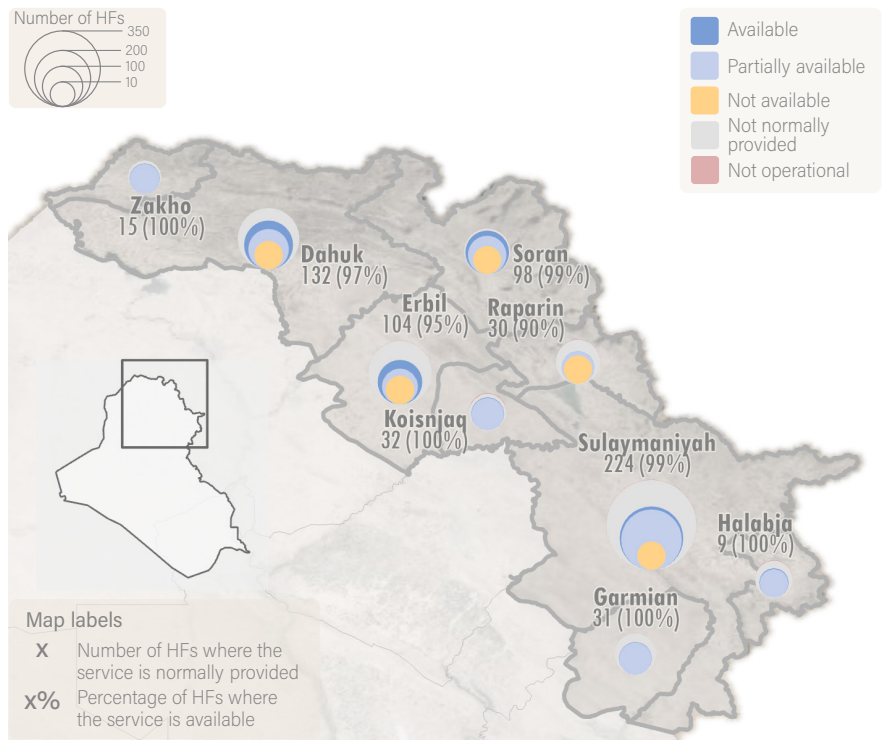
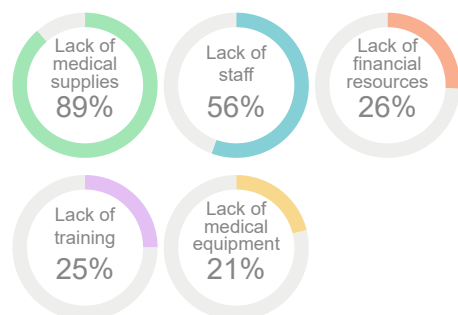
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# MINOR TRAUMA DEFINITIVE MANAGEMENT

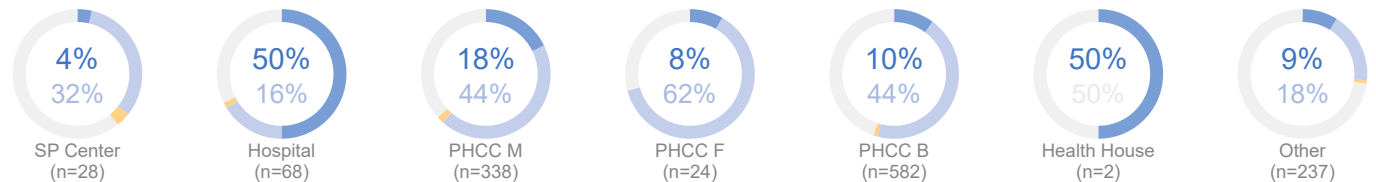
## Service availability



## Main barriers impeding service delivery n = 497



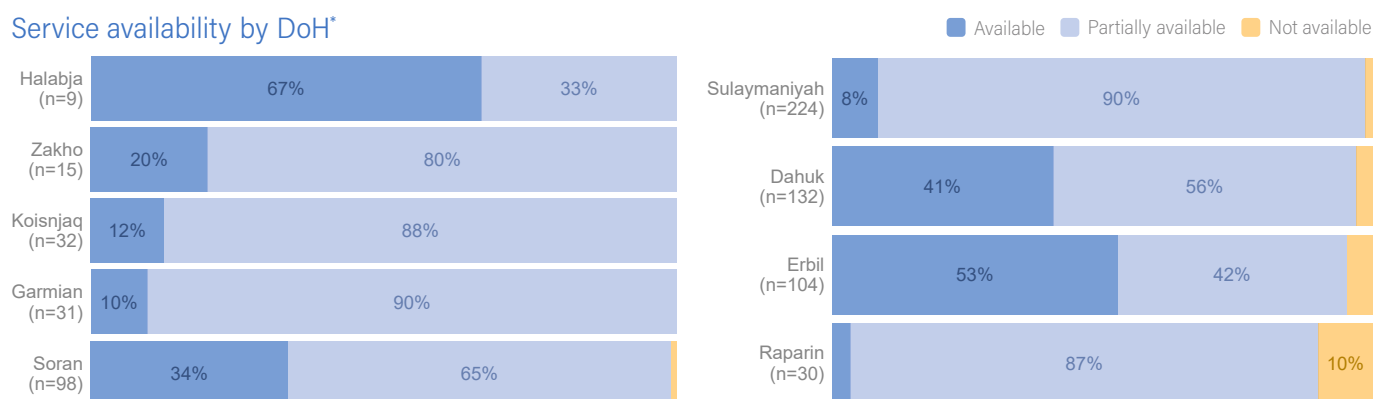
## Service availability by type of HF



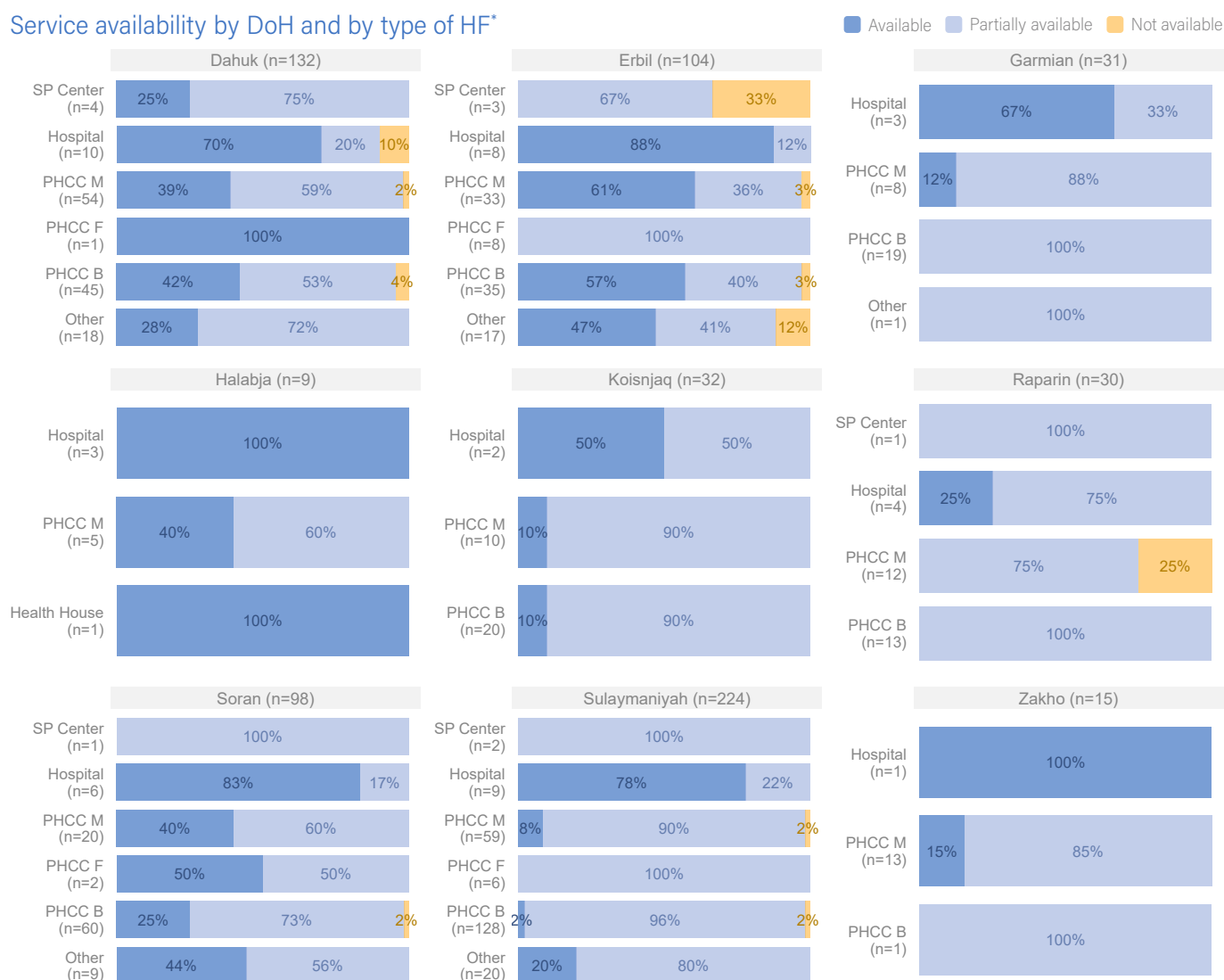
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



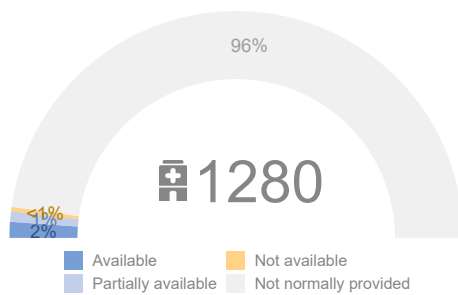
## Service availability by DoH and by type of HF\*



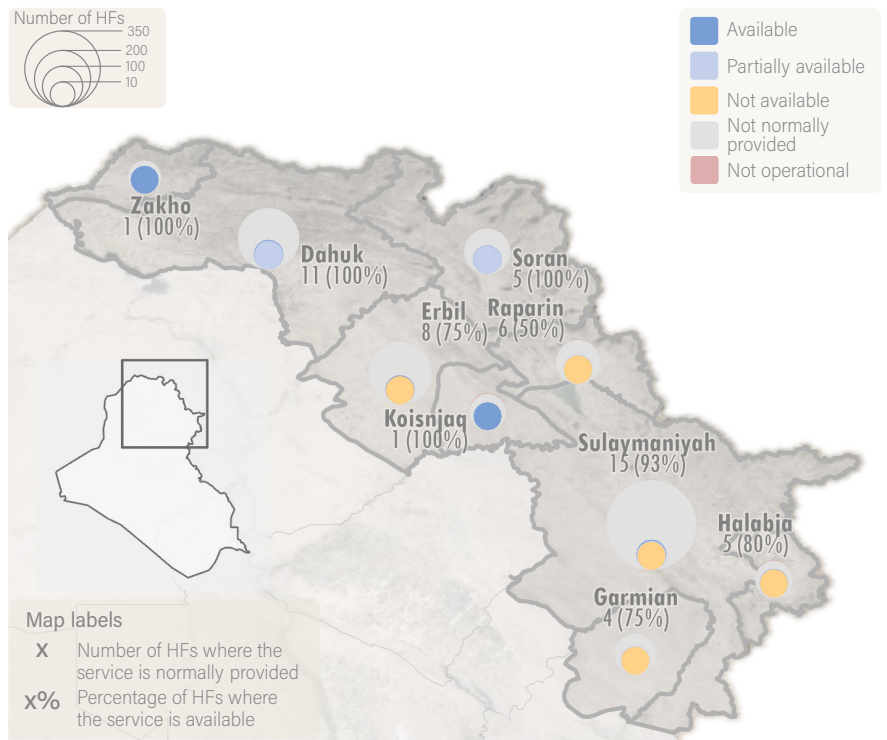
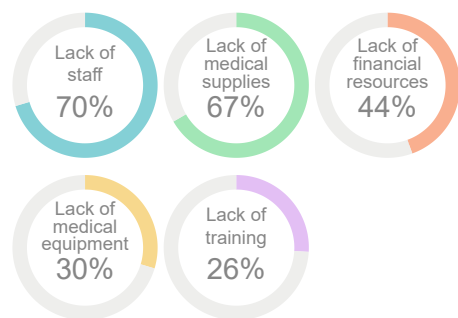
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# EMERGENCY AND ELECTIVE SURGERY

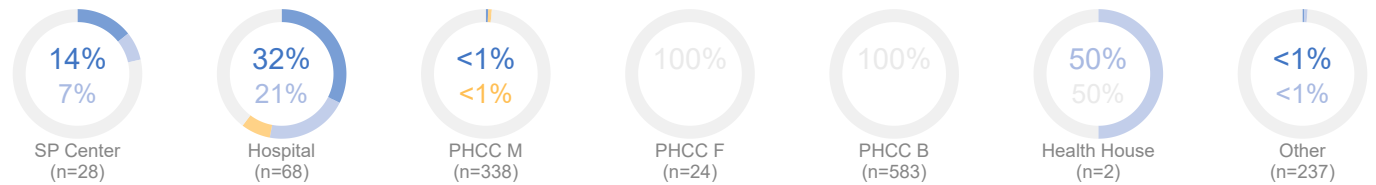
## Service availability



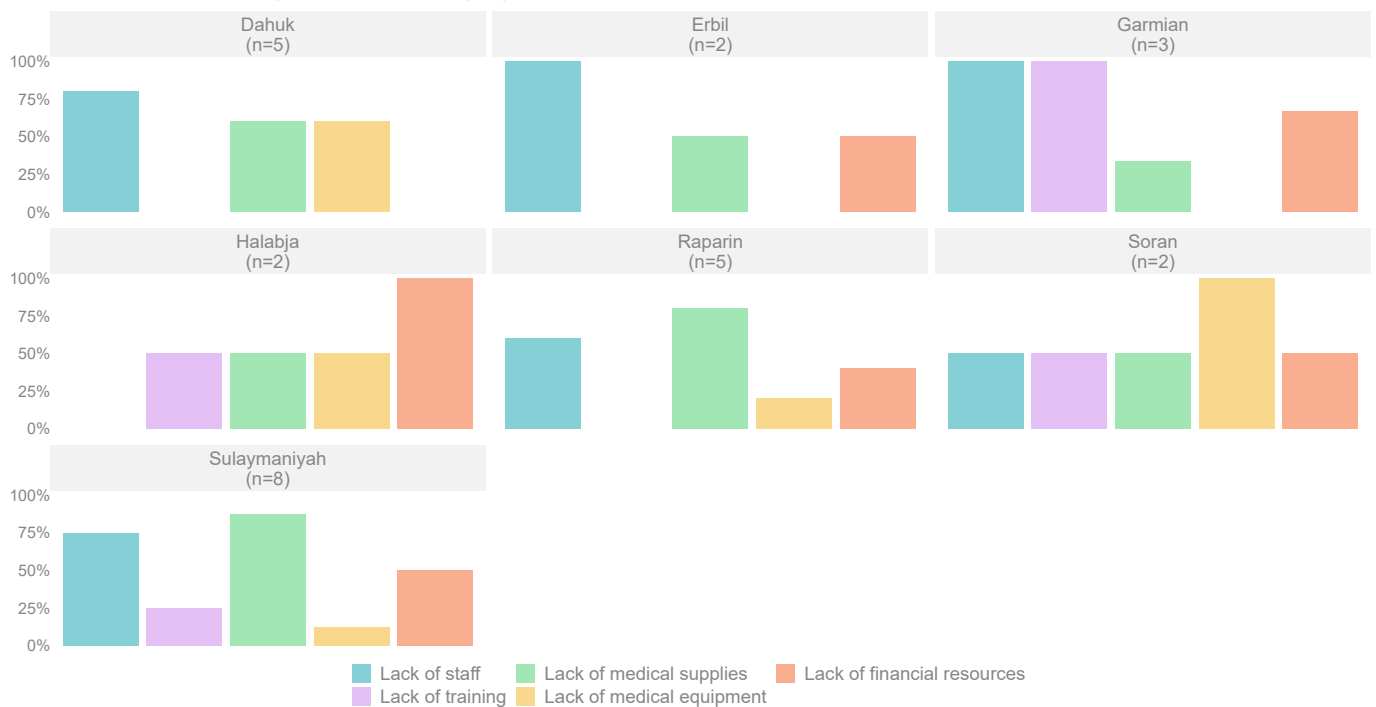
## Main barriers impeding service delivery n = 27



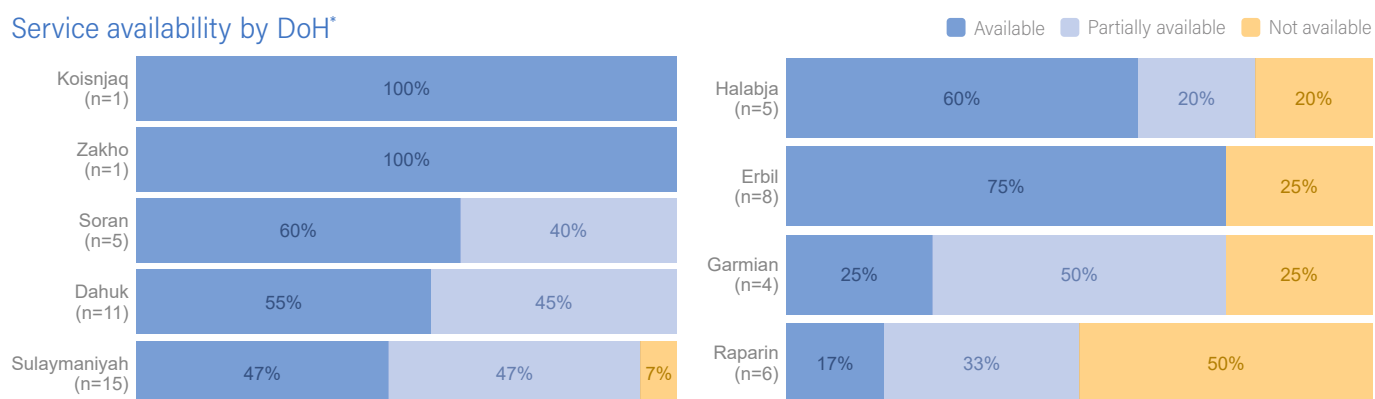
## Service availability by type of HF



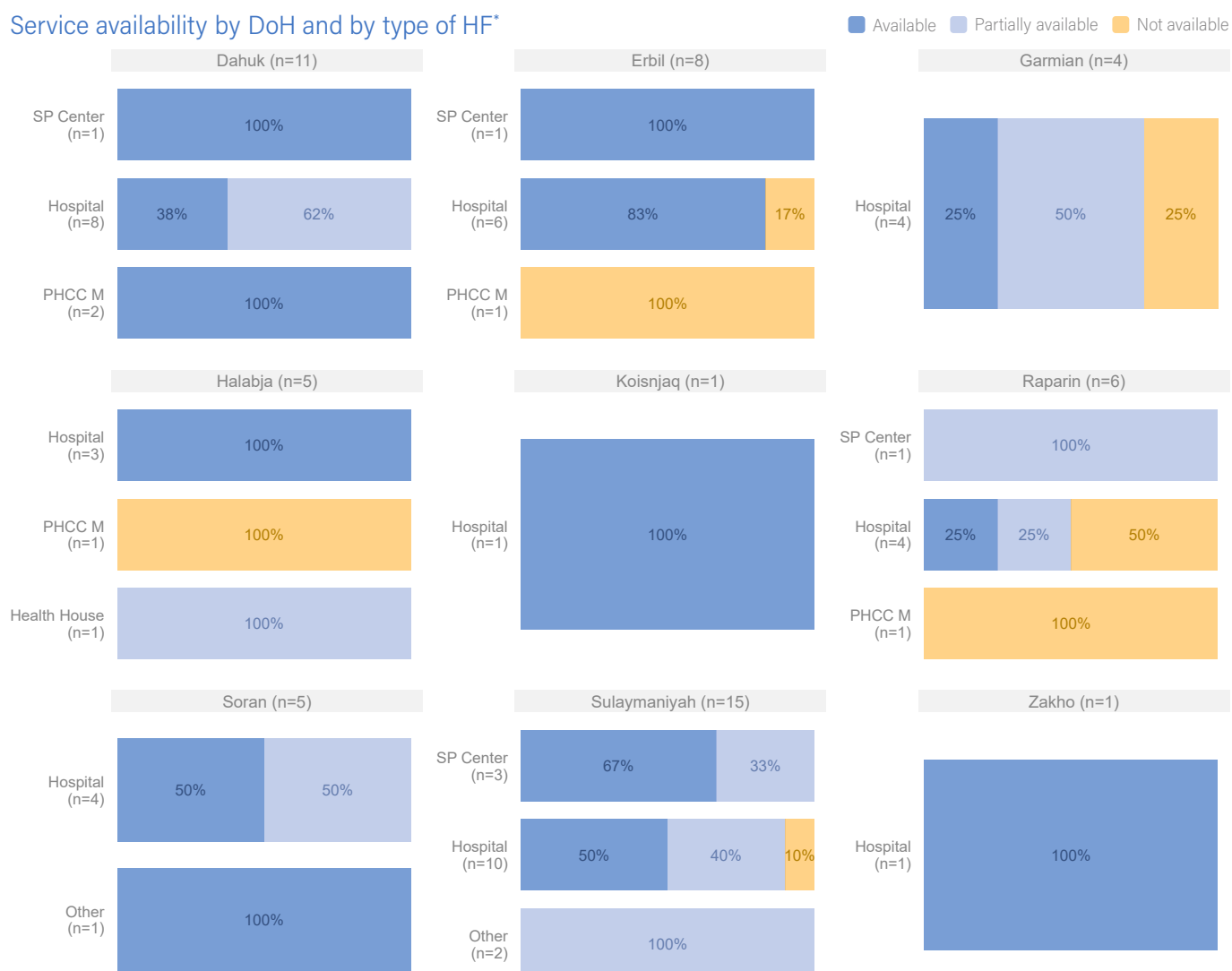
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



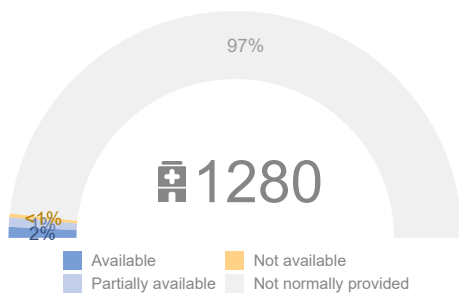
## Service availability by DoH and by type of HF\*



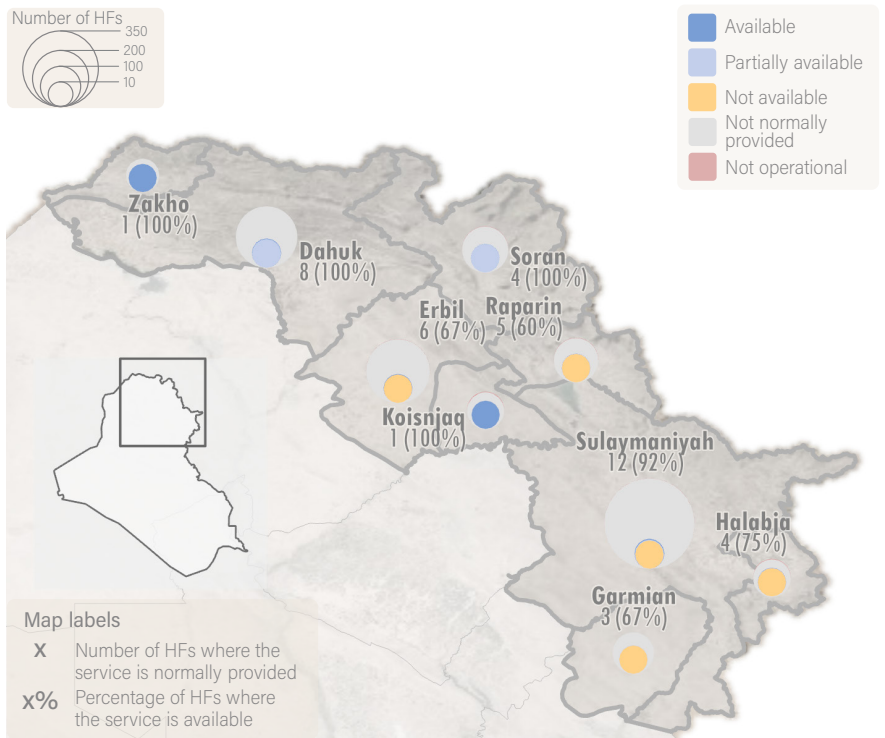
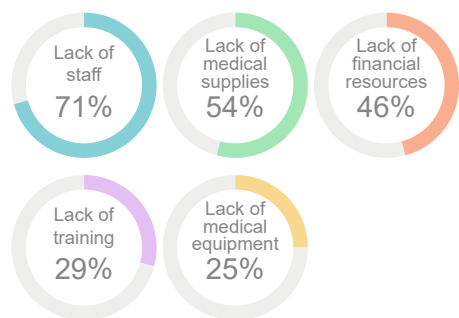
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# EMERGENCY AND ELECTIVE SURGERY WITH AT LEAST TWO OPERATING THEATRES

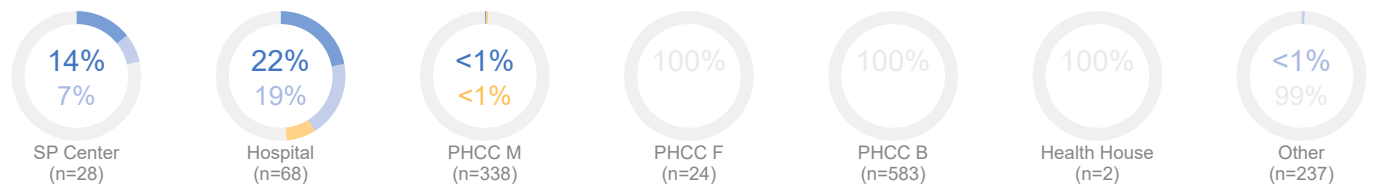
## Service availability



## Main barriers impeding service delivery n = 24



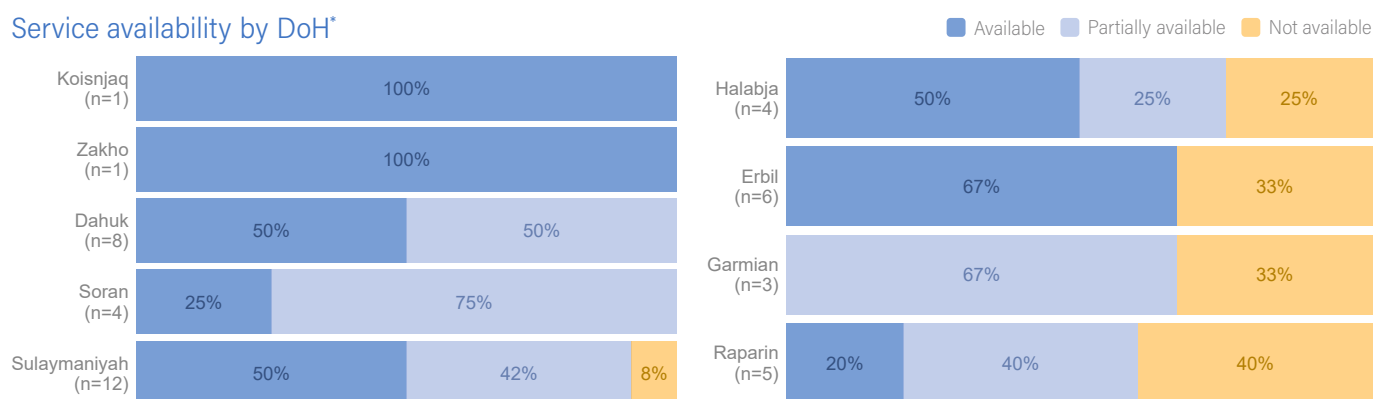
## Service availability by type of HF



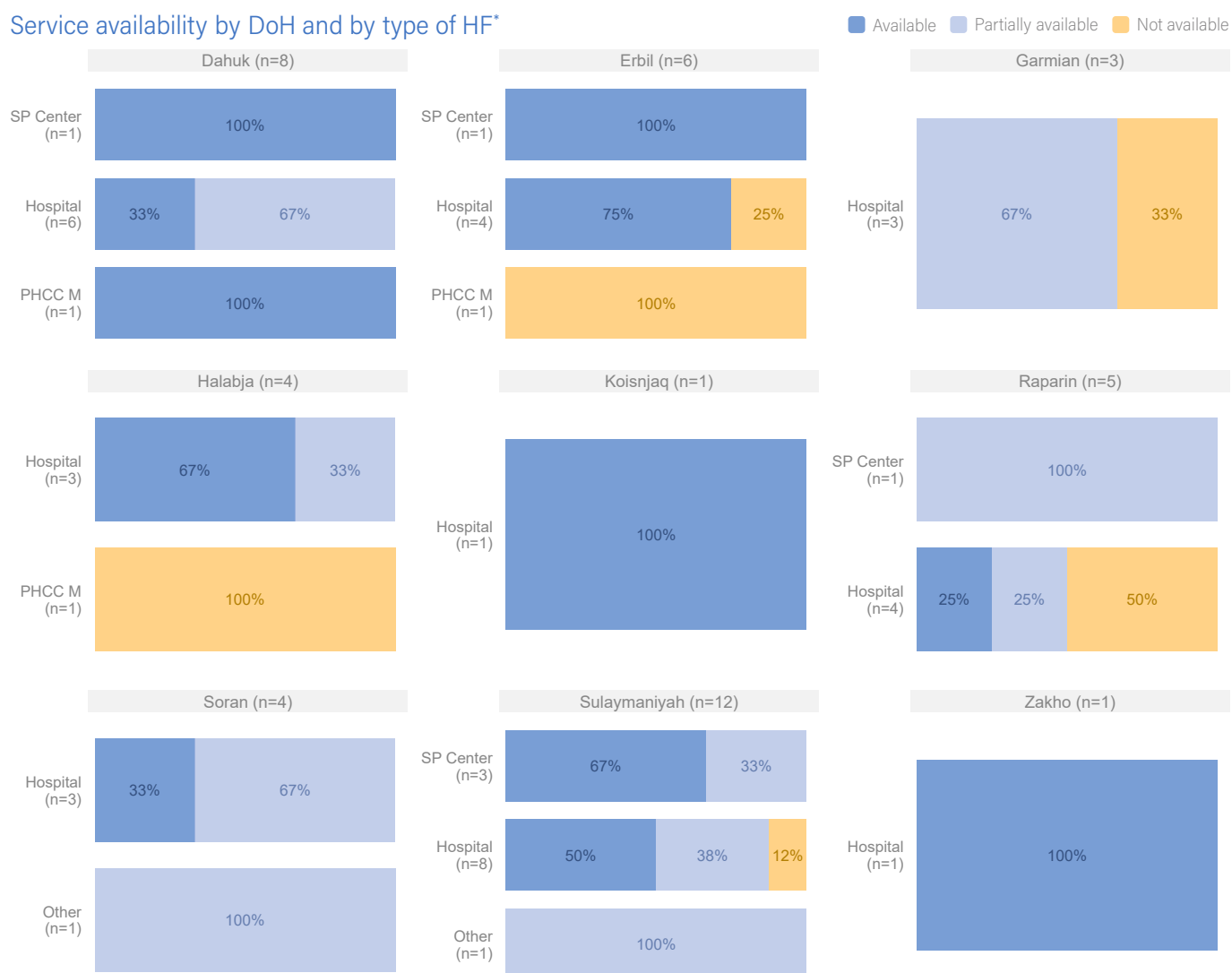
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



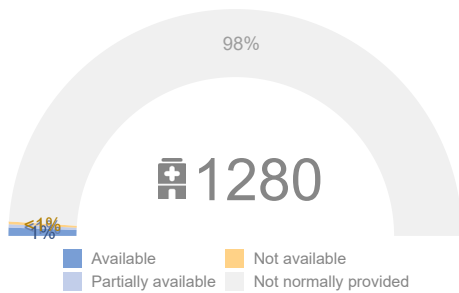
## Service availability by DoH and by type of HF\*



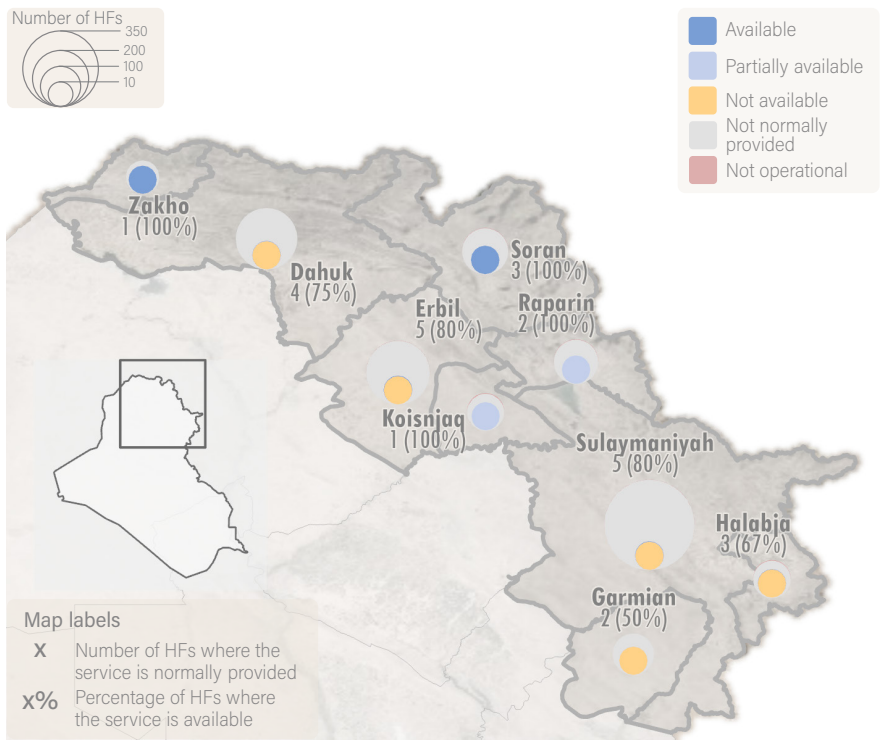
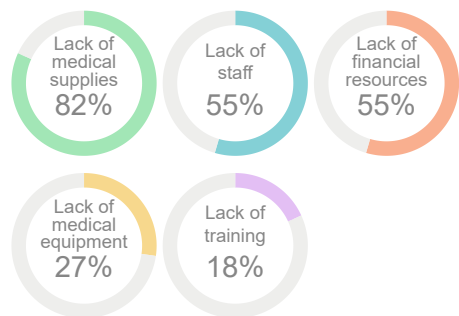
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# ORTHOPEDIC/TRAUMA WARD

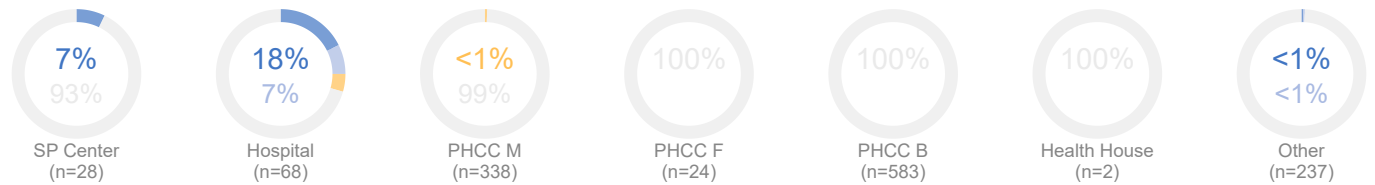
## Service availability



## Main barriers impeding service delivery n = 11



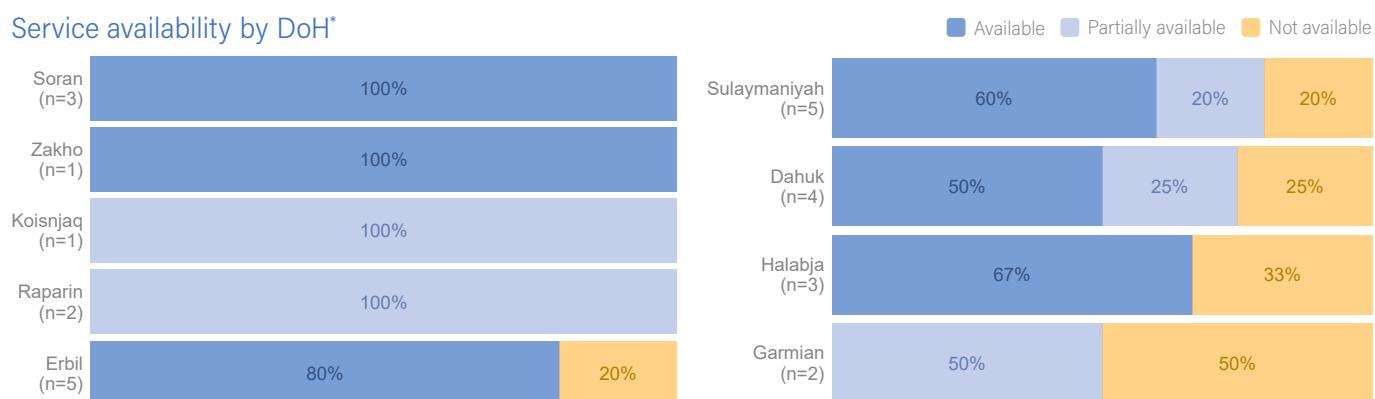
## Service availability by type of HF



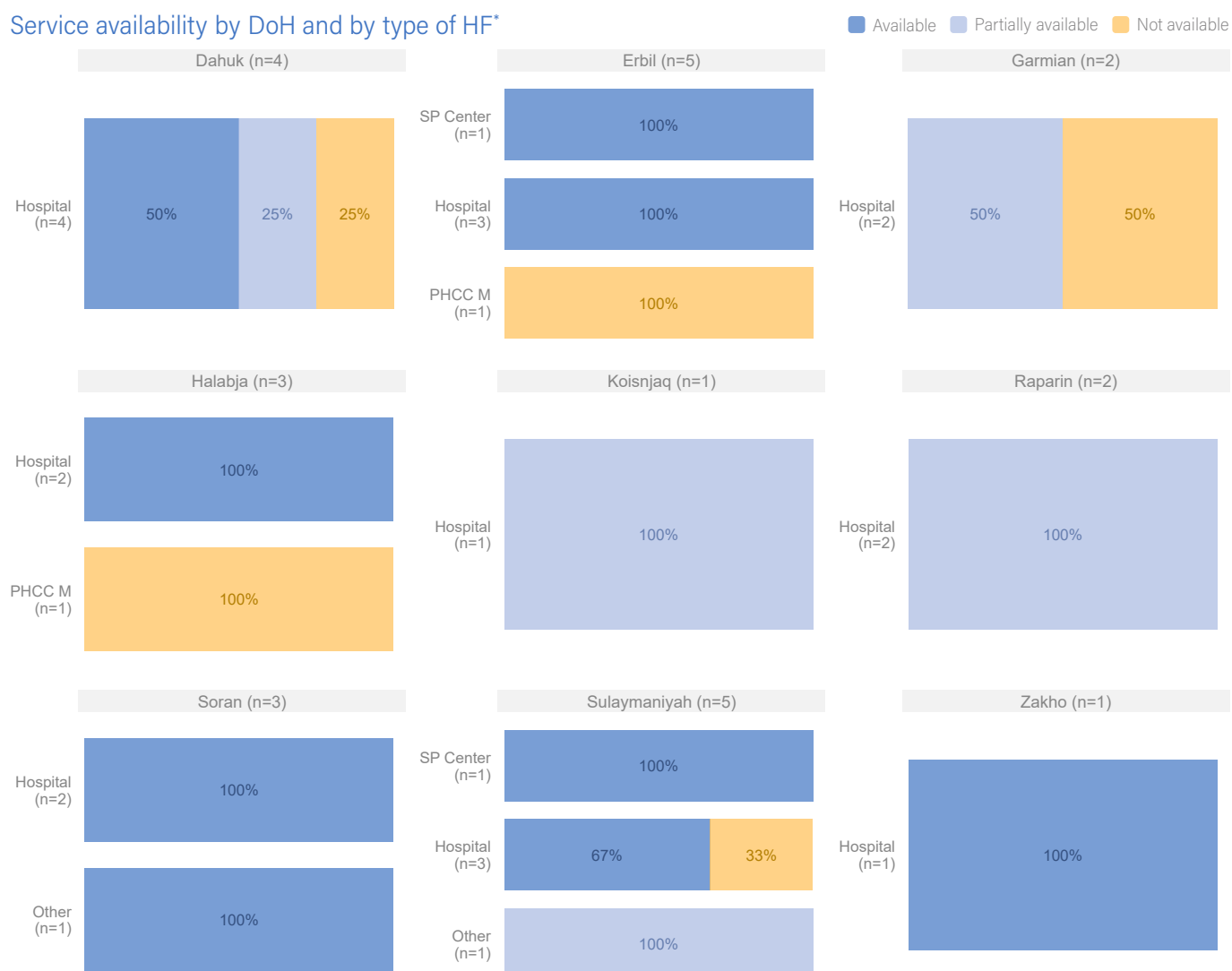
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



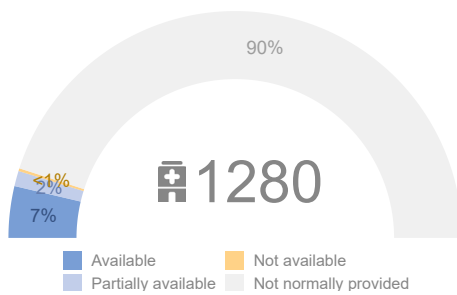
## Service availability by DoH and by type of HF\*



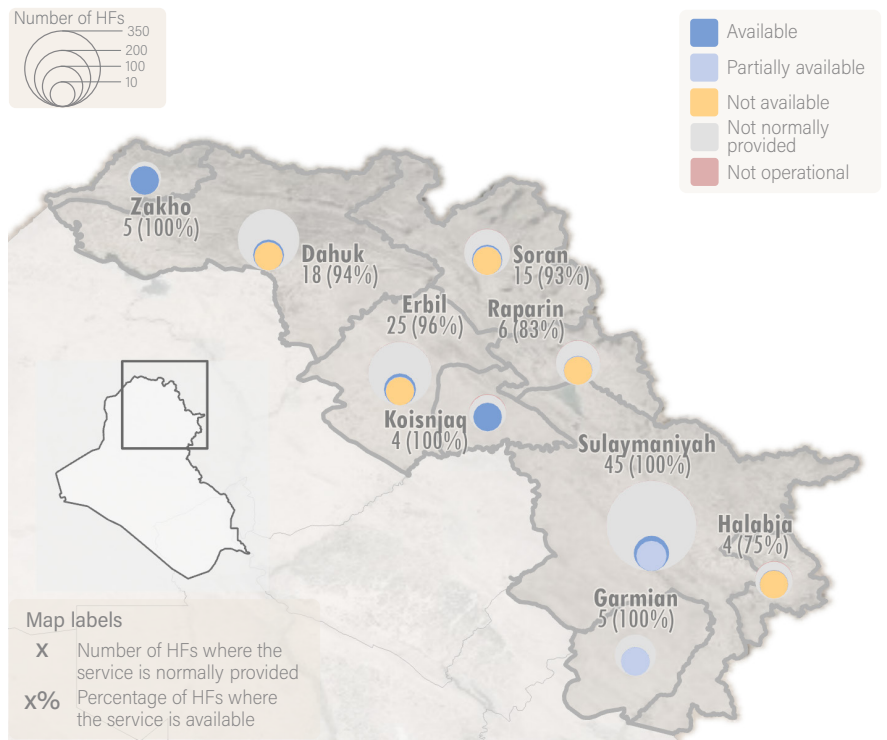
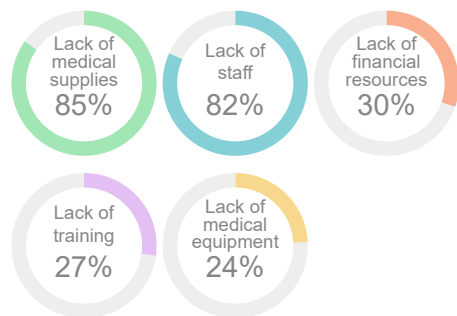
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# SHORT HOSPITALIZATION CAPACITY

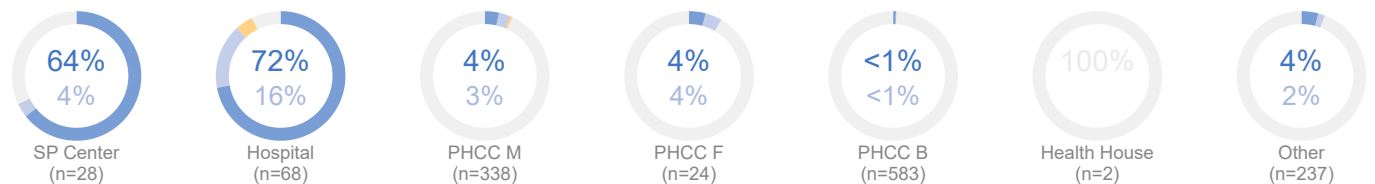
## Service availability



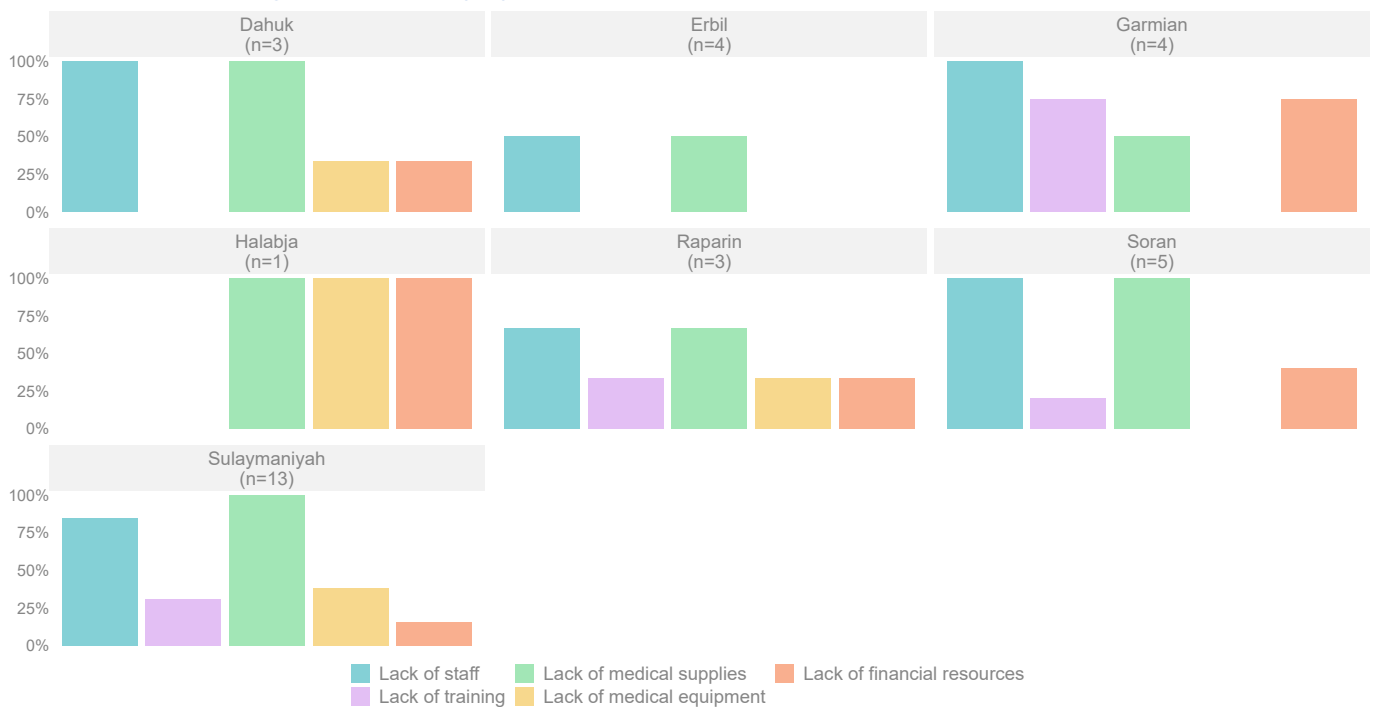
## Main barriers impeding service delivery n = 33



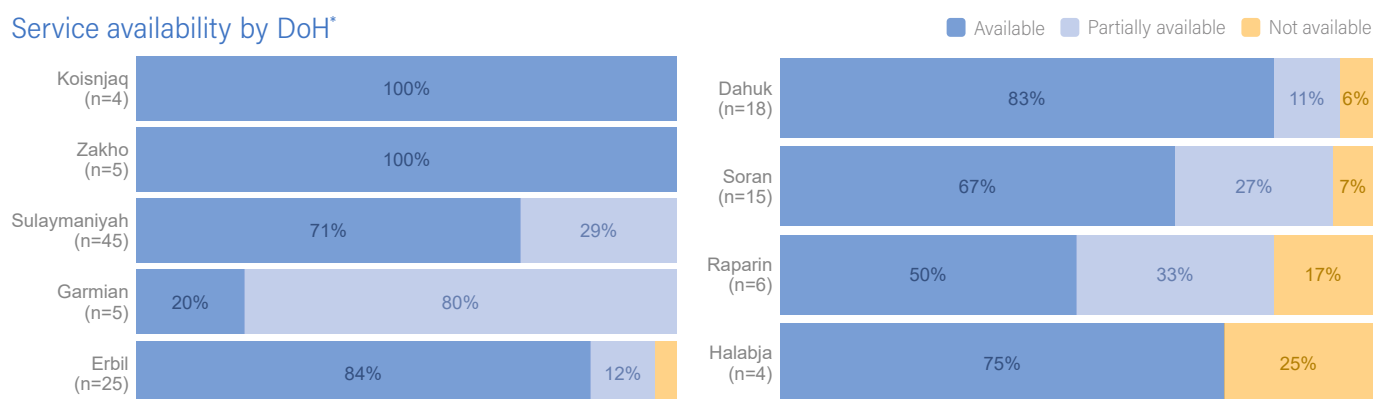
## Service availability by type of HF



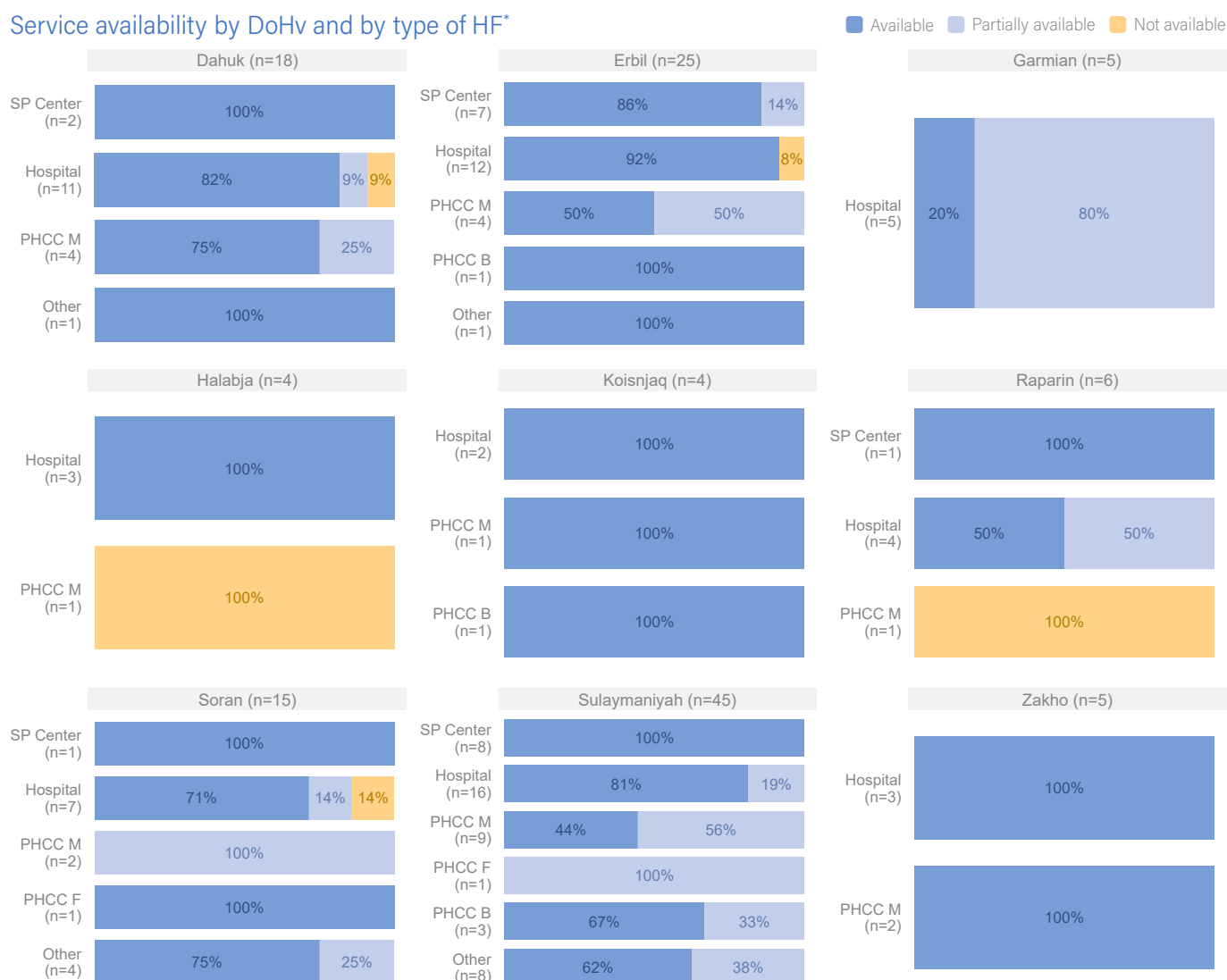
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



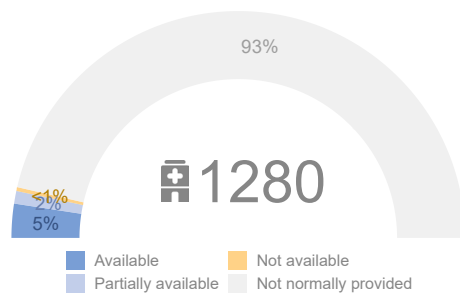
## Service availability by DoHv and by type of HF\*



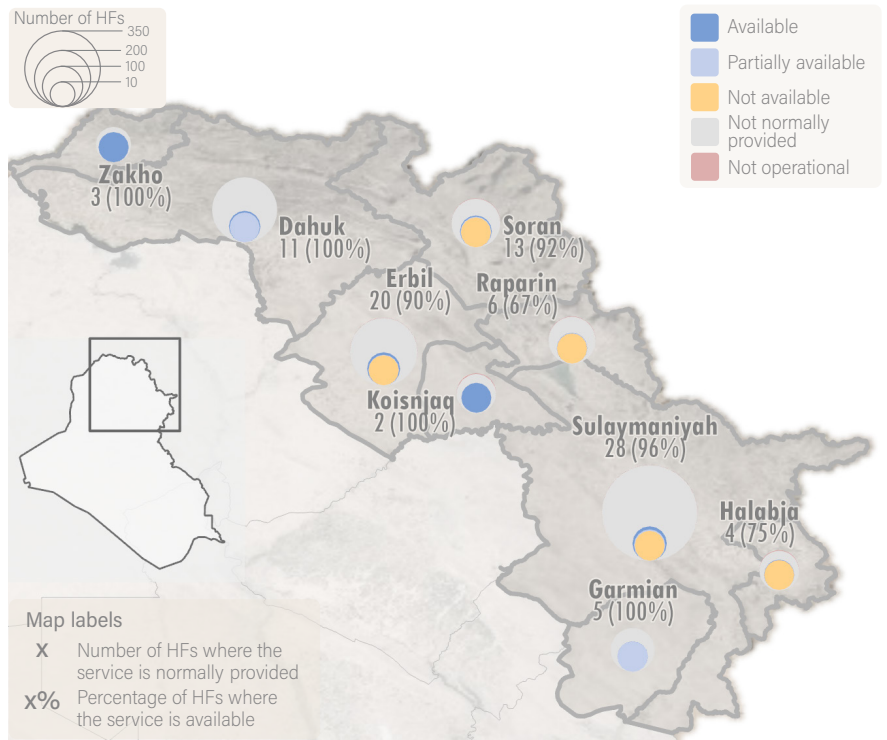
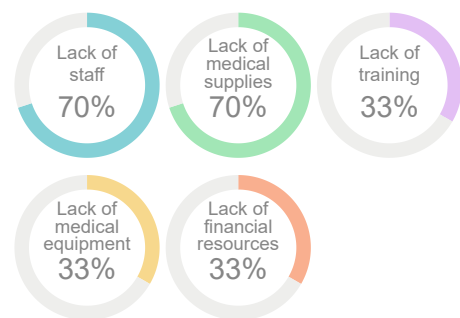
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# 20 INPATIENT BED CAPACITY

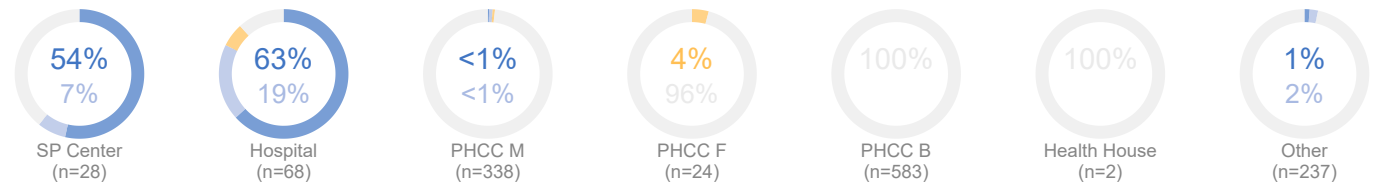
## Service availability



## Main barriers impeding service delivery n = 30



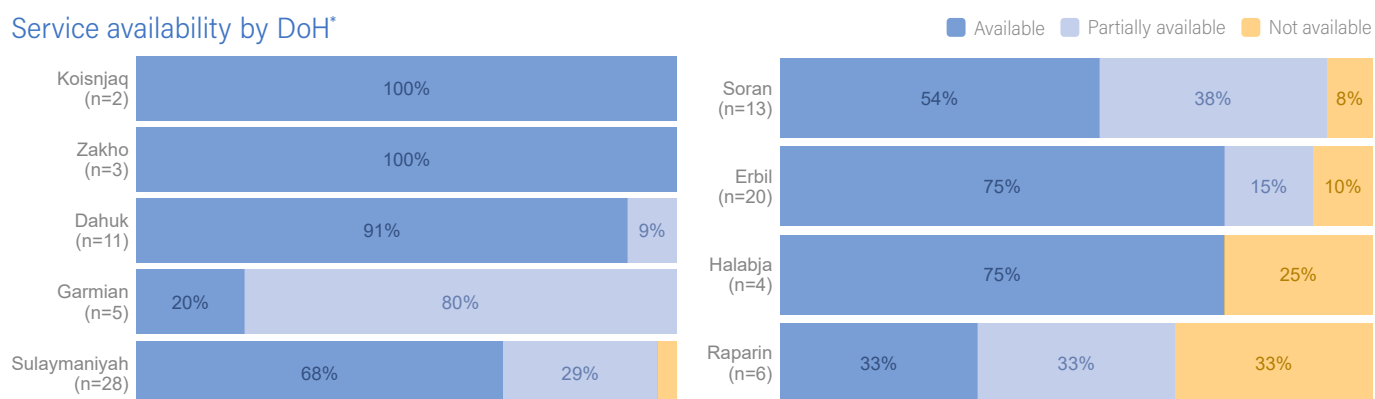
## Service availability by type of HF



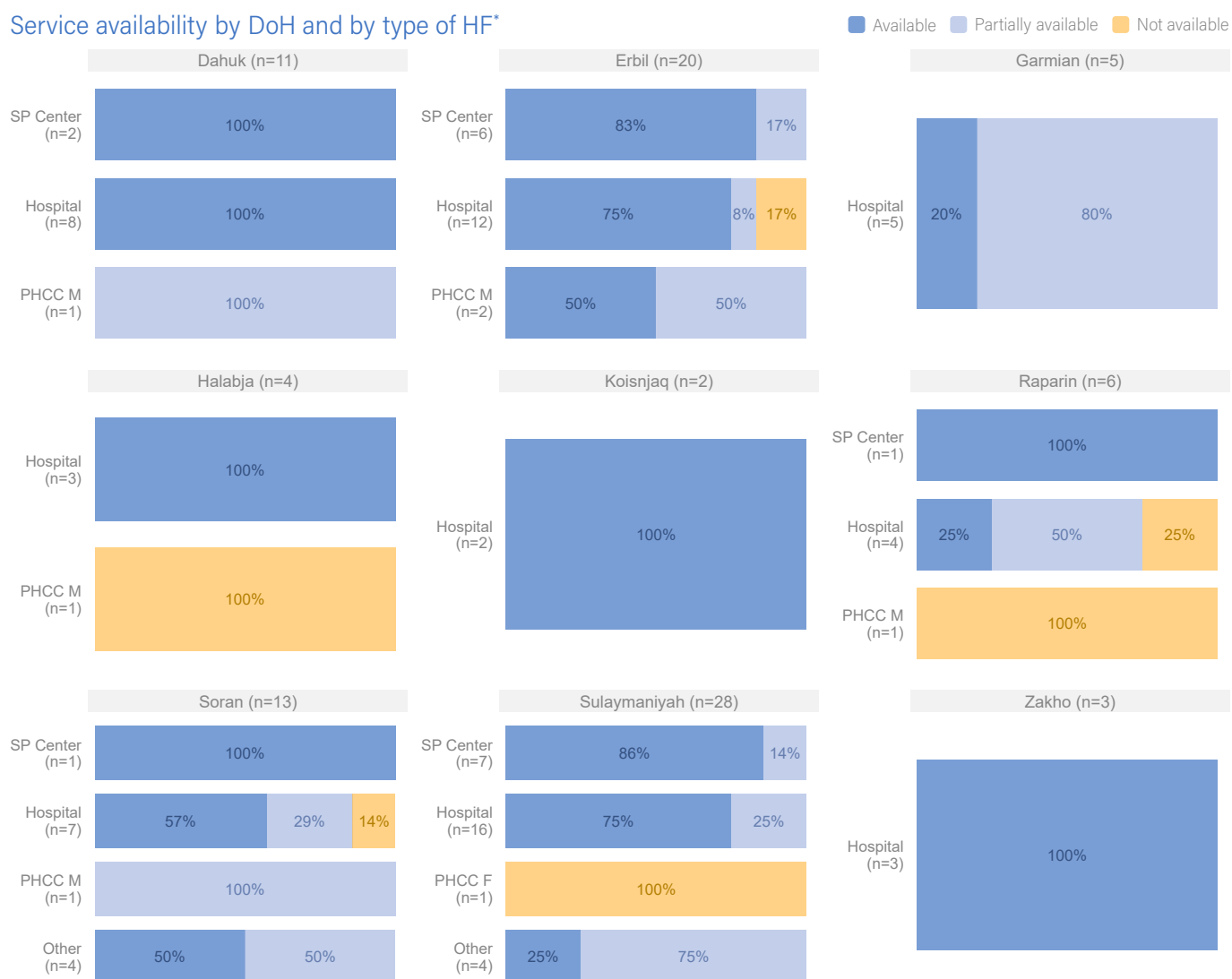
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



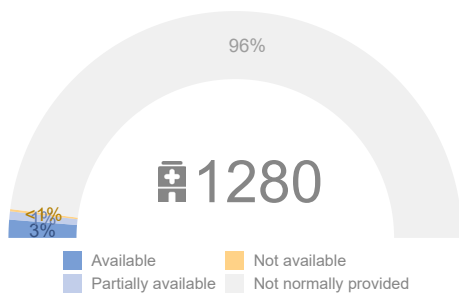
## Service availability by DoH and by type of HF\*



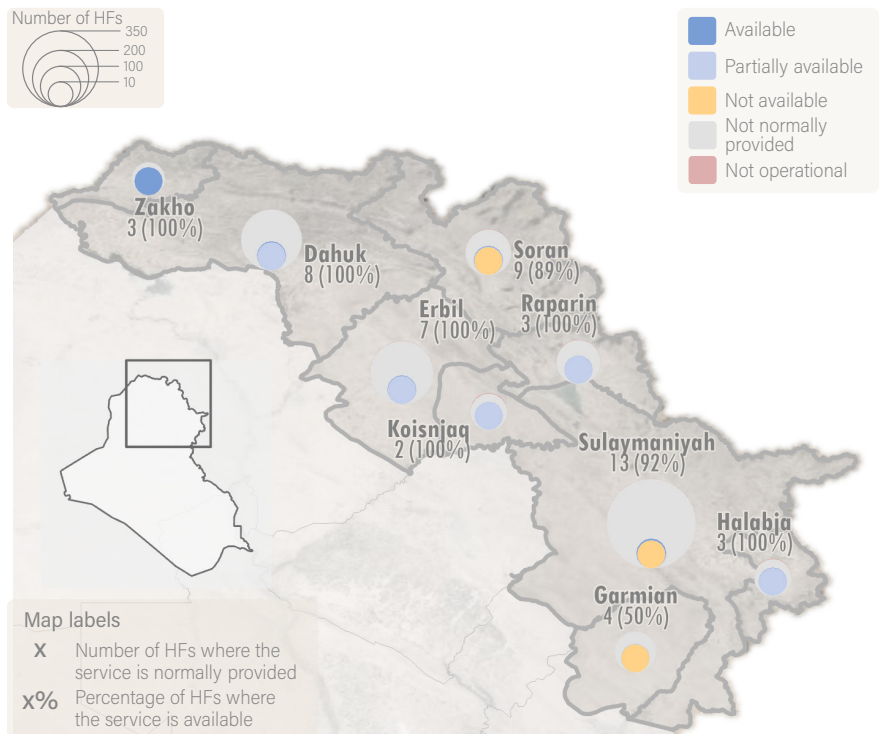
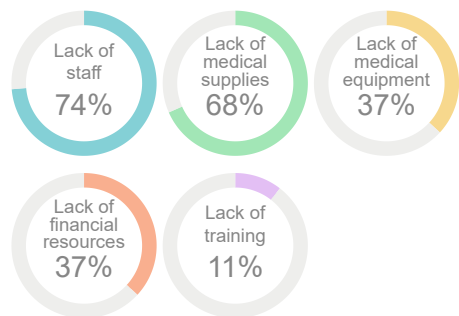
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# 50 INPATIENT BED CAPACITY

## Service availability



## Main barriers impeding service delivery n = 19



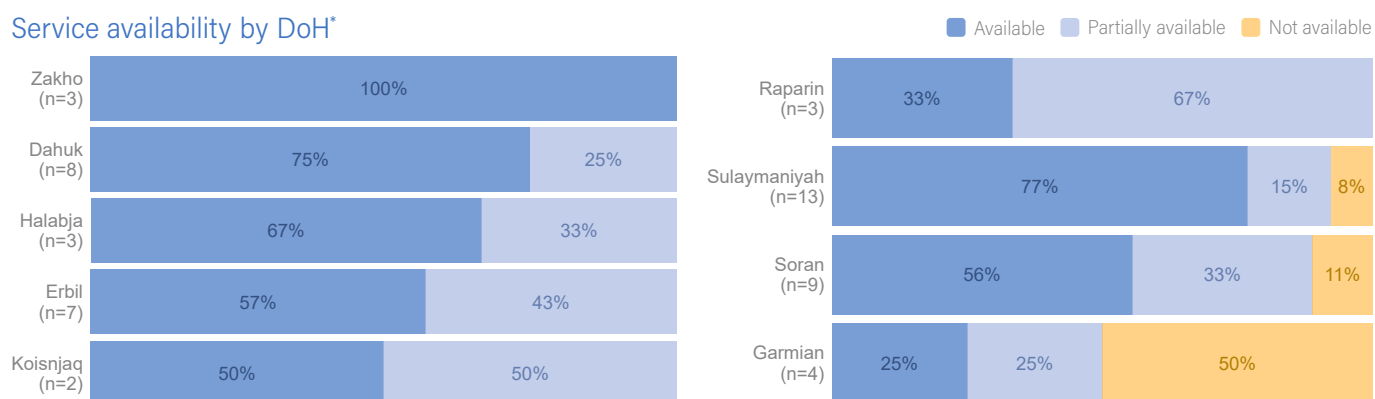
## Service availability by type of HF



## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



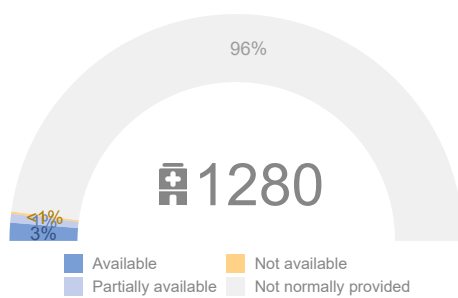
## Service availability by DoH and by type of HF\*



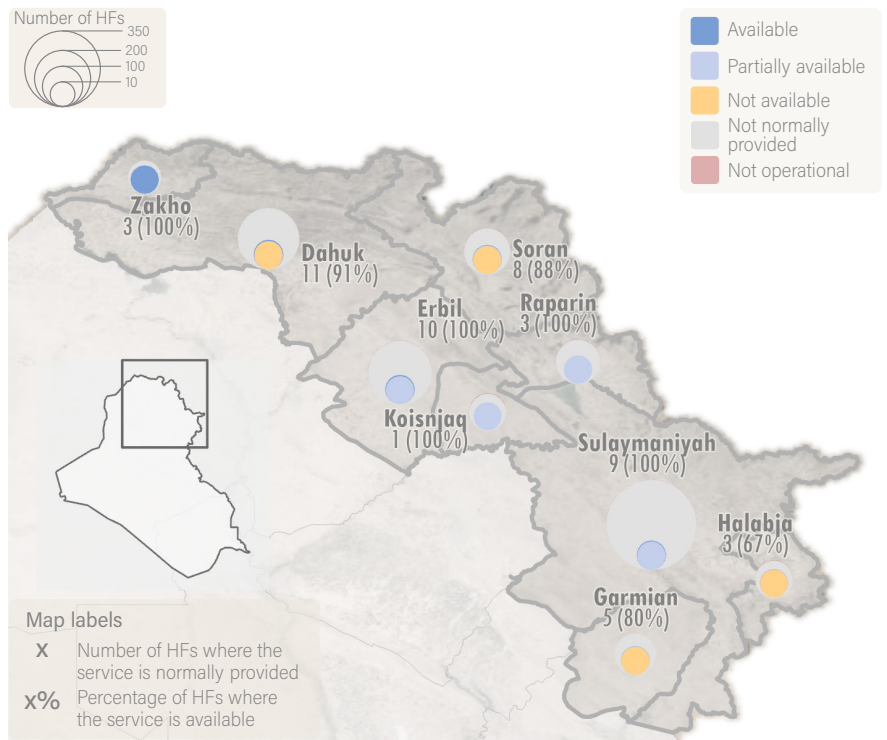
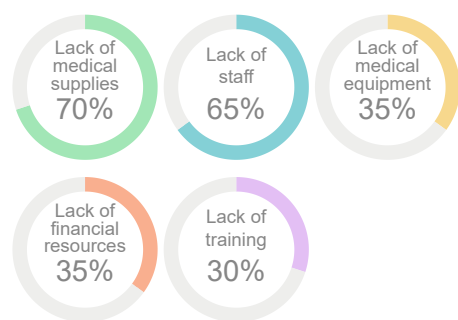
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# INPATIENT CRITICAL CARE MANAGEMENT

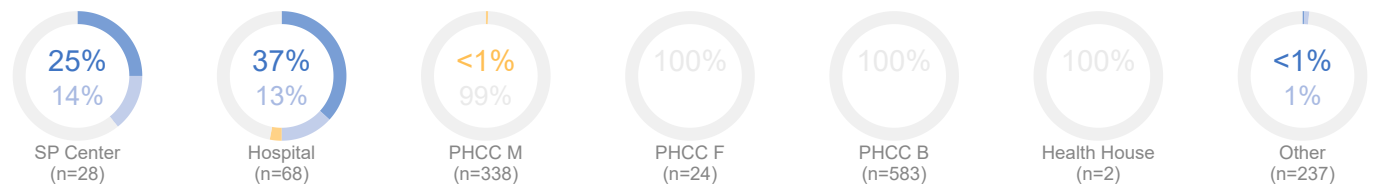
## Service availability



## Main barriers impeding service delivery n = 20



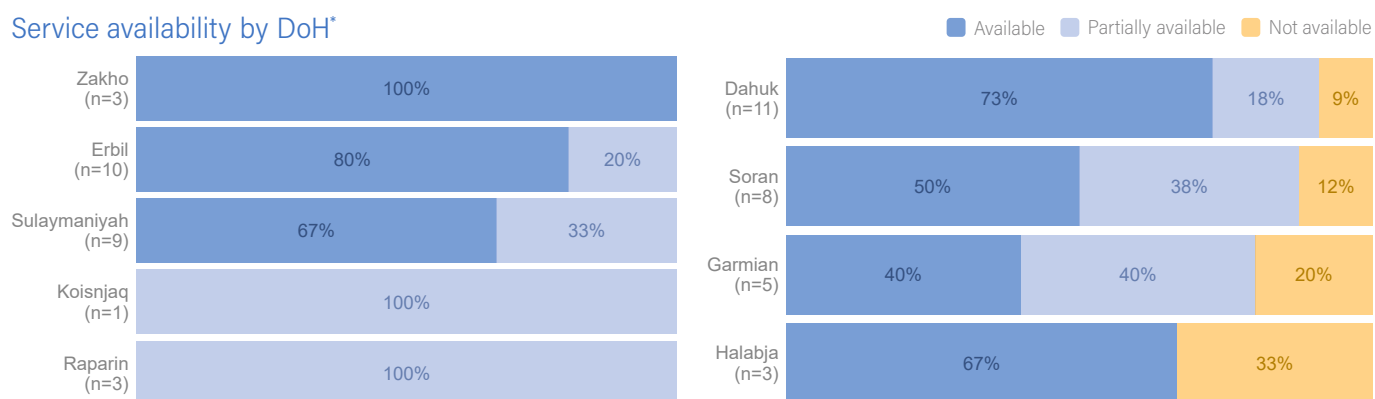
## Service availability by type of HF



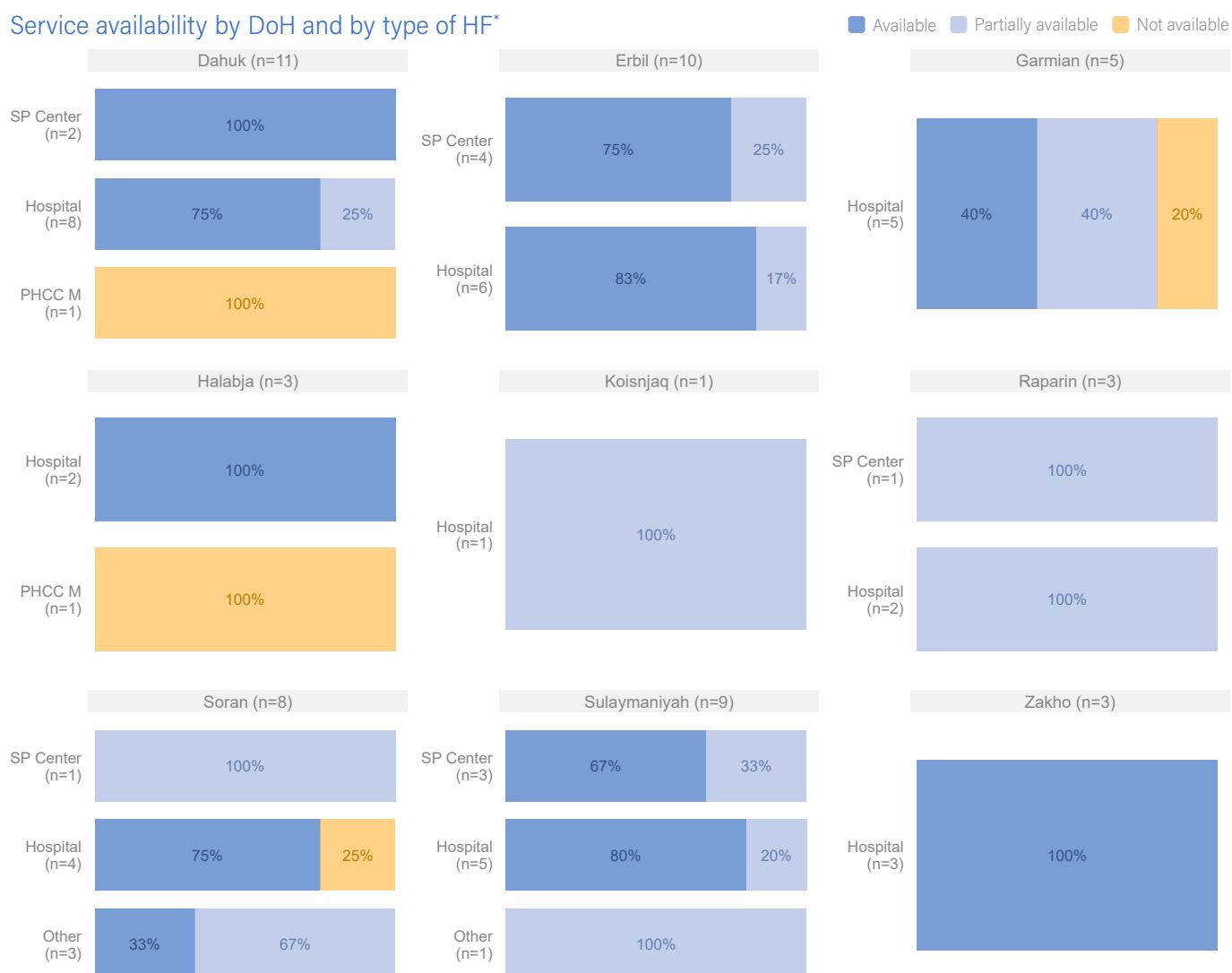
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



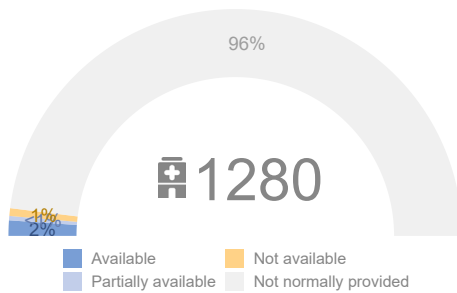
## Service availability by DoH and by type of HF\*



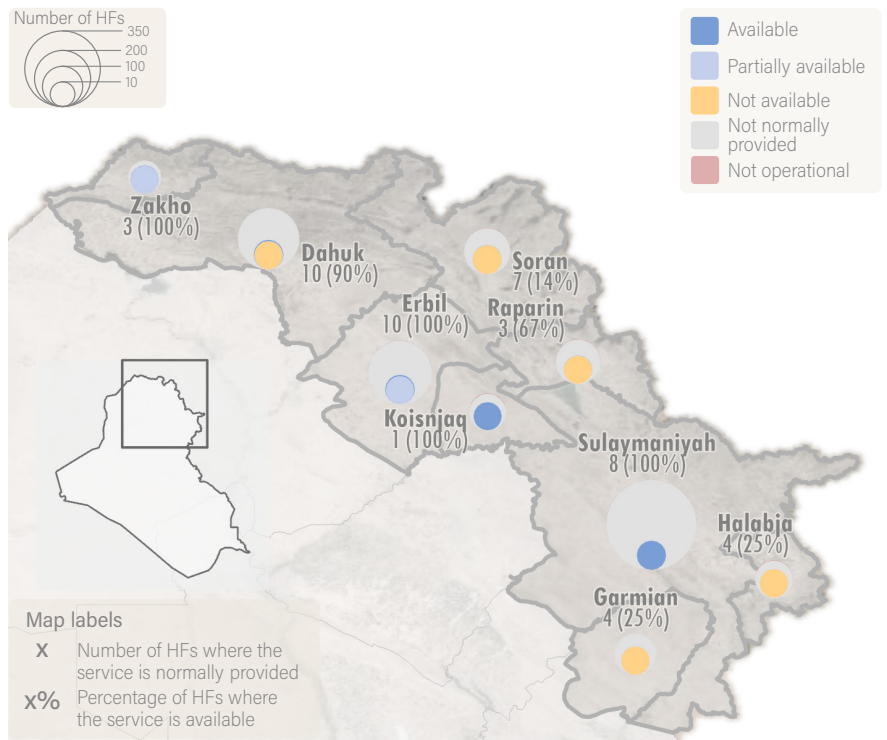
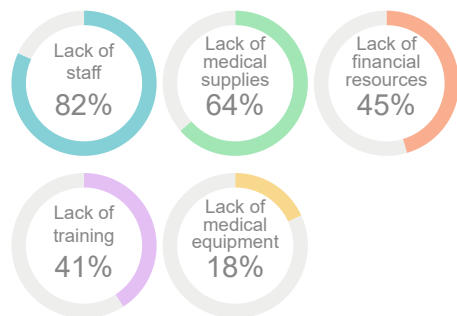
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# INTENSIVE CARE UNIT

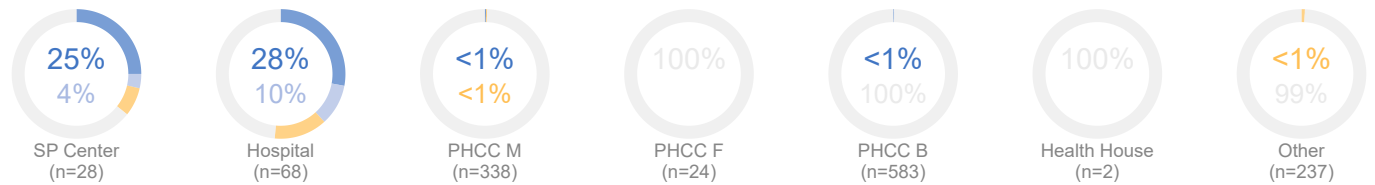
## Service availability



## Main barriers impeding service delivery n = 22



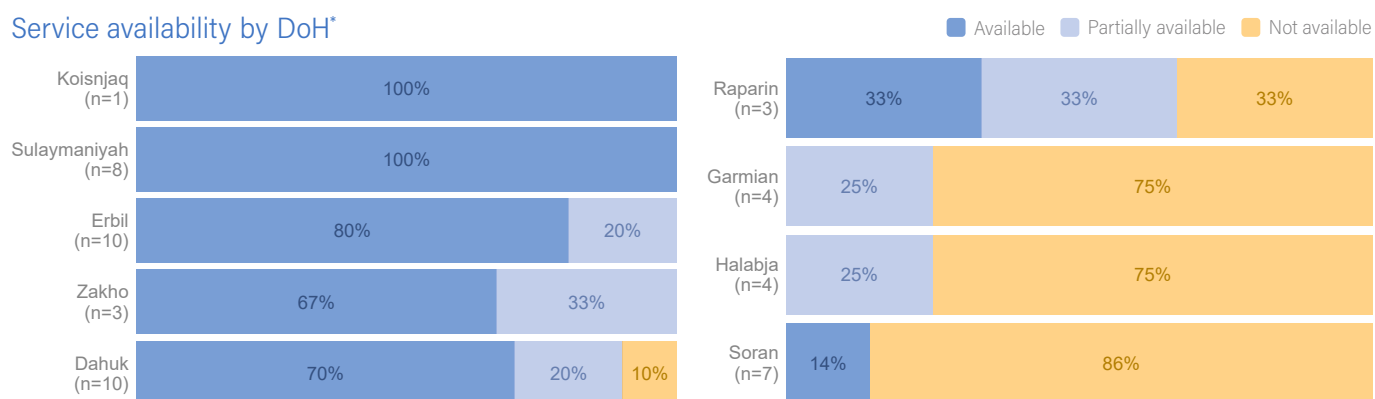
## Service availability by type of HF



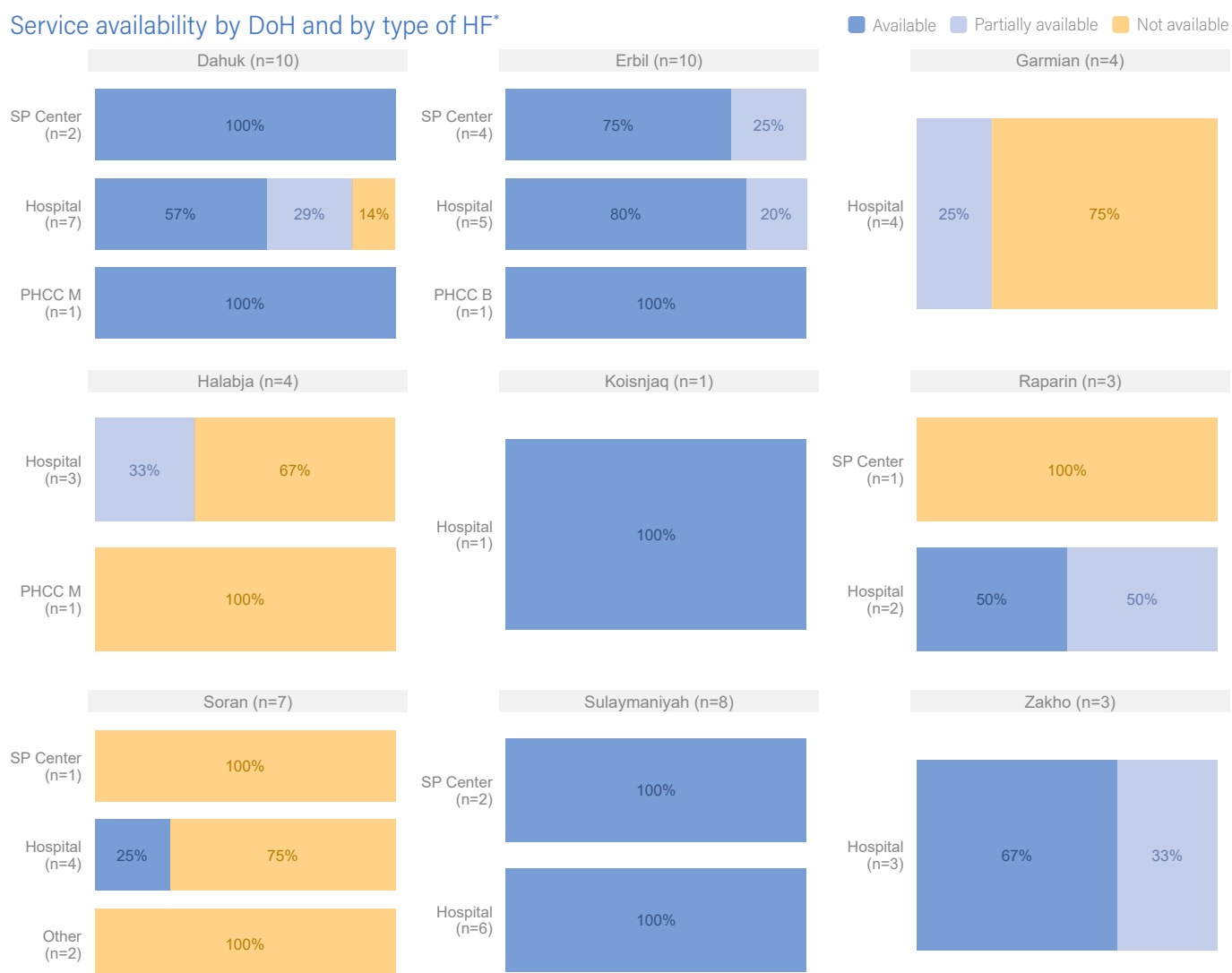
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



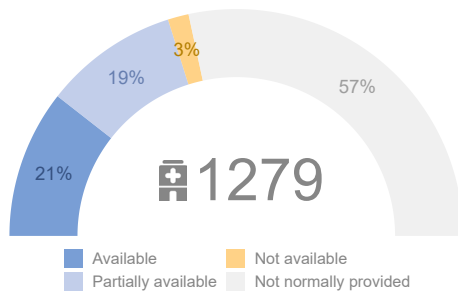
## Service availability by DoH and by type of HF\*



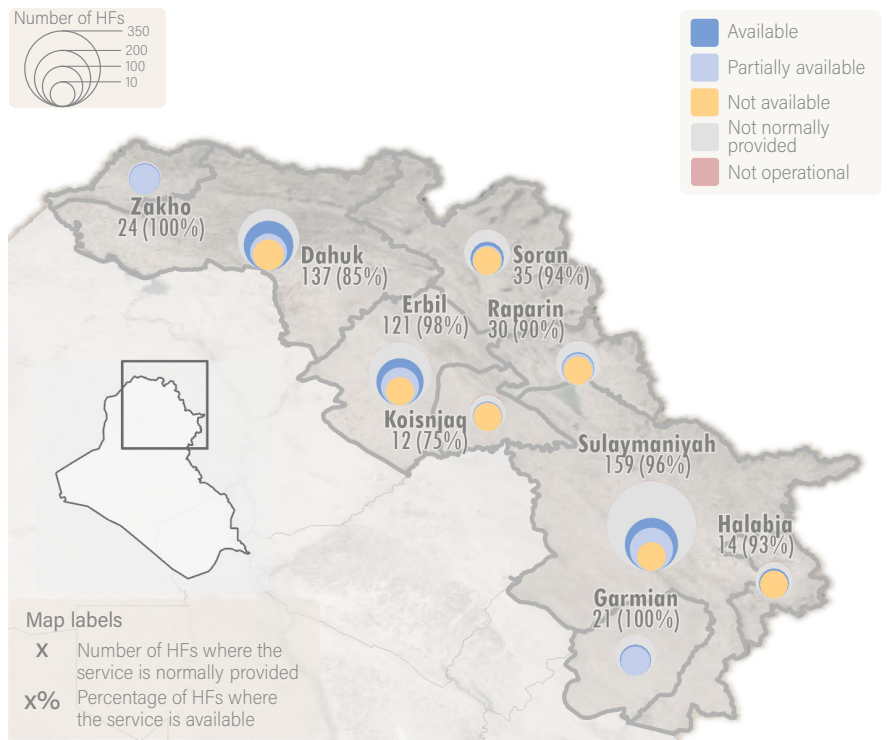
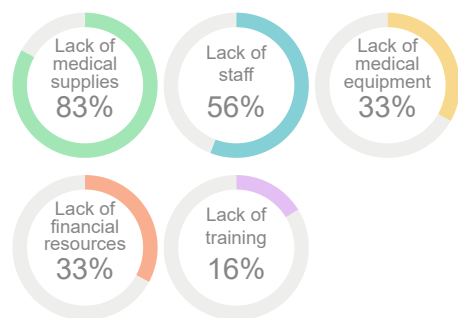
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# BASIC LABORATORY

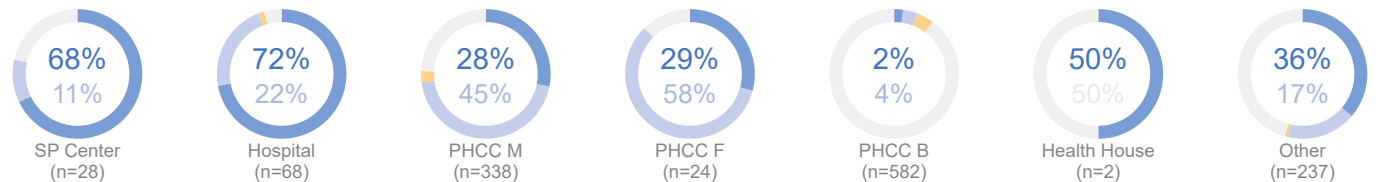
## Service availability



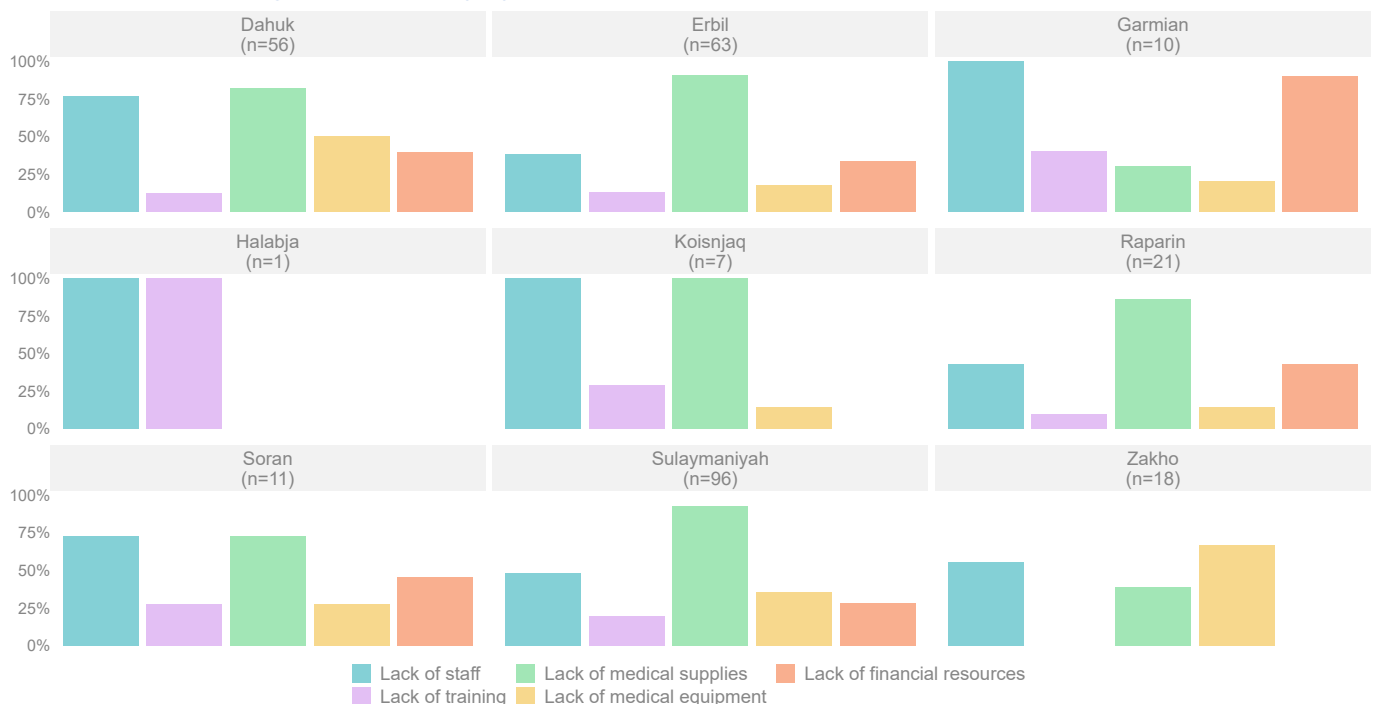
## Main barriers impeding service delivery n = 283



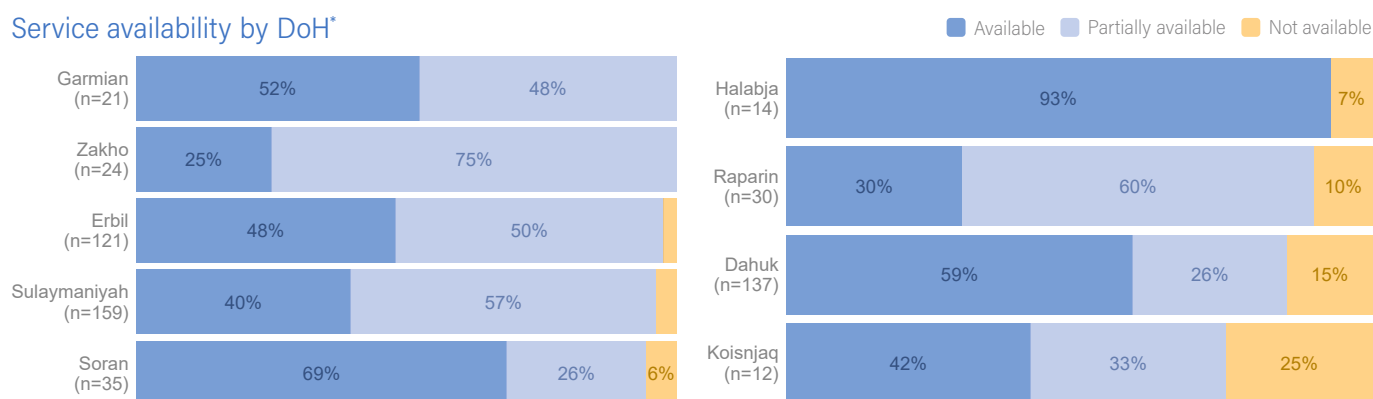
## Service availability by type of HF



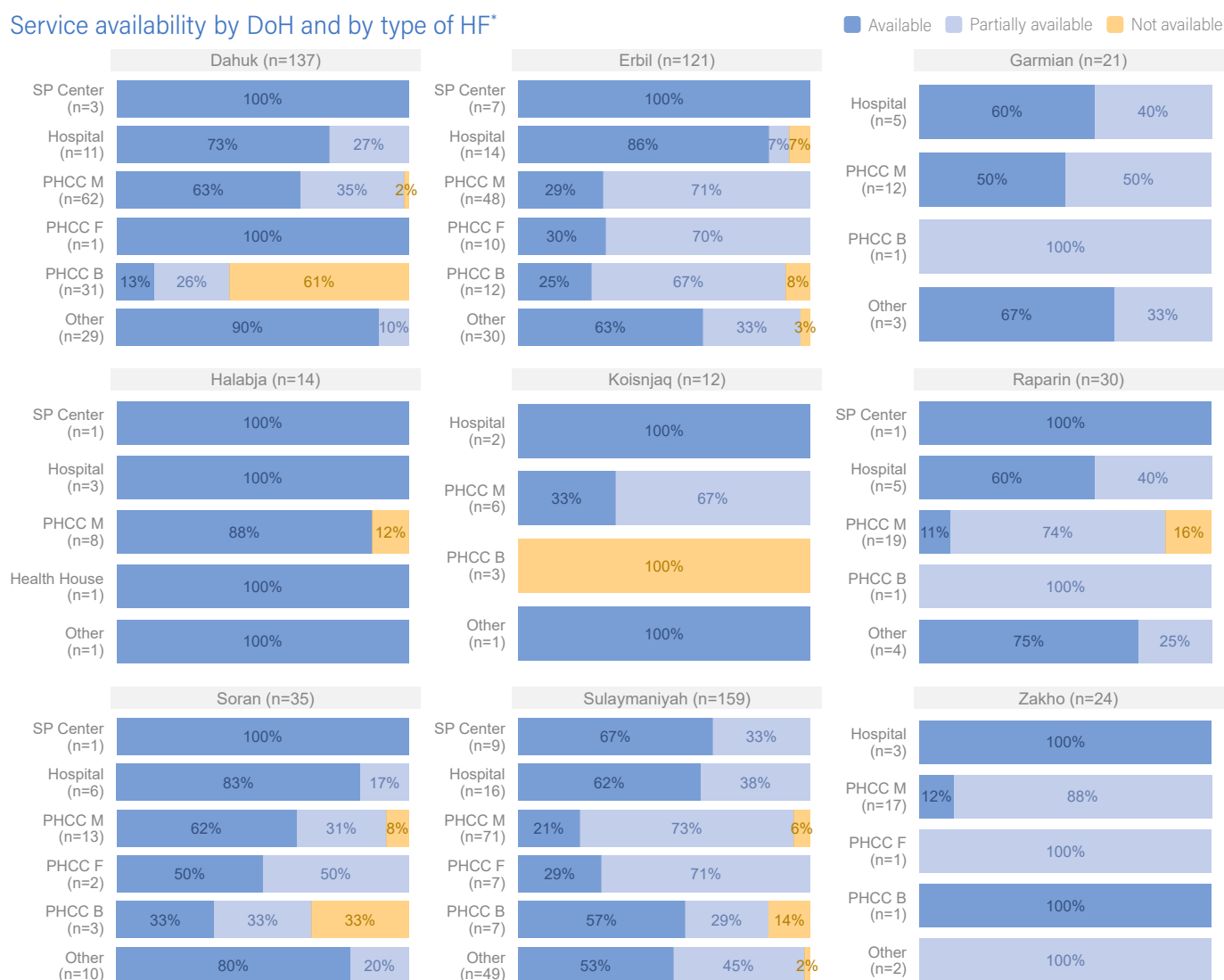
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



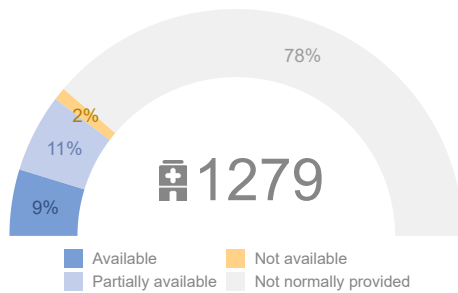
## Service availability by DoH and by type of HF\*



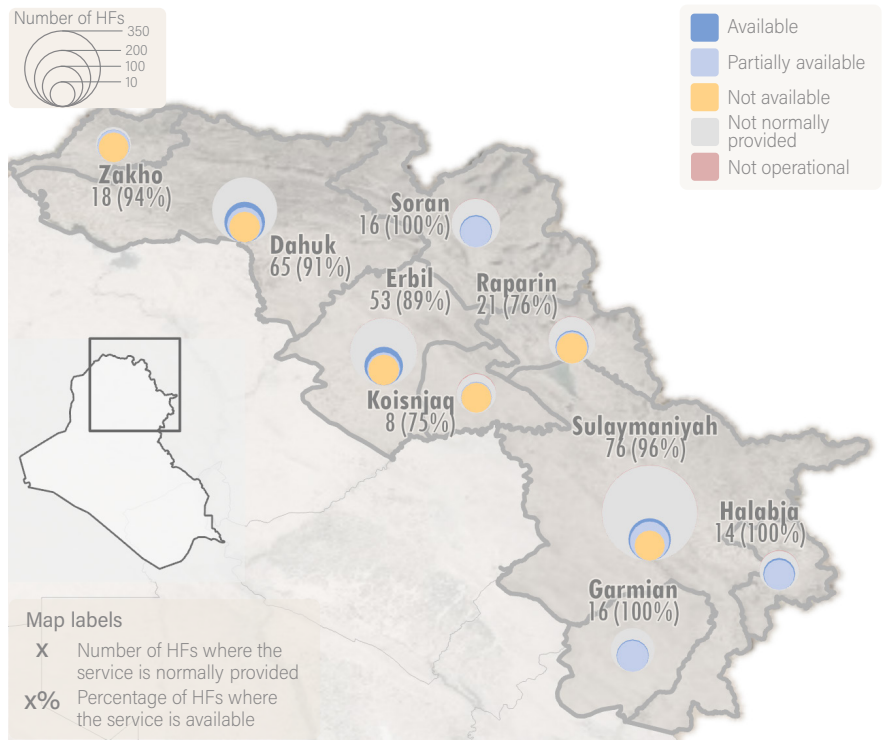
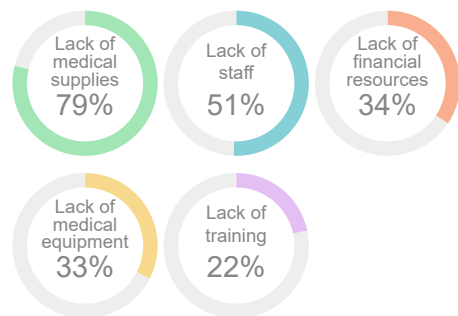
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# LABORATORY SERVICES SECONDARY LEVEL

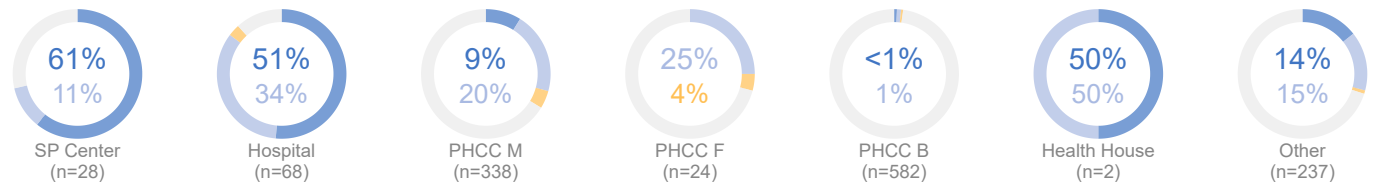
## Service availability



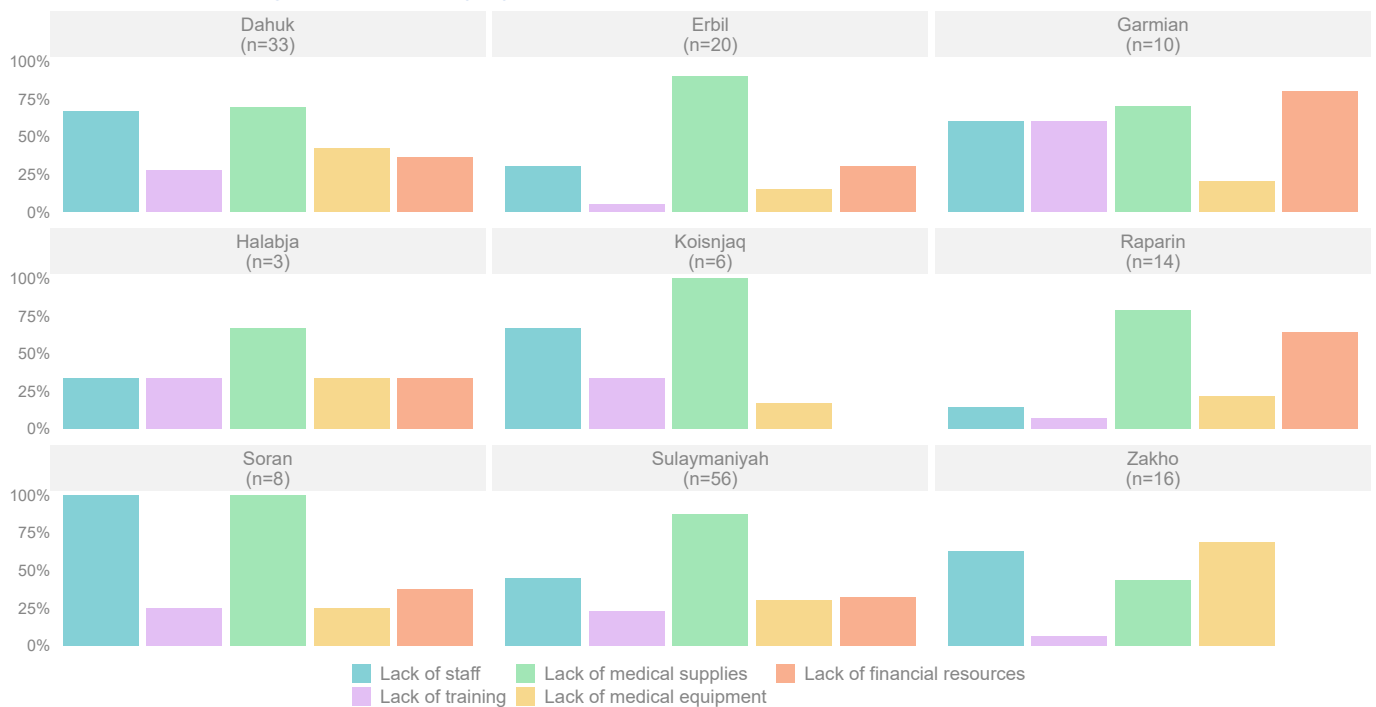
## Main barriers impeding service delivery n = 166



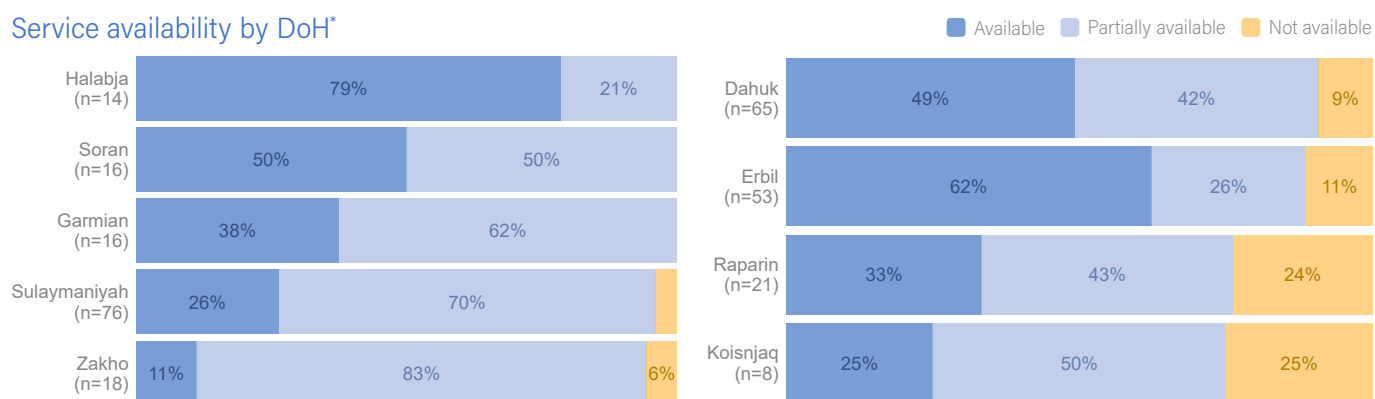
## Service availability by type of HF



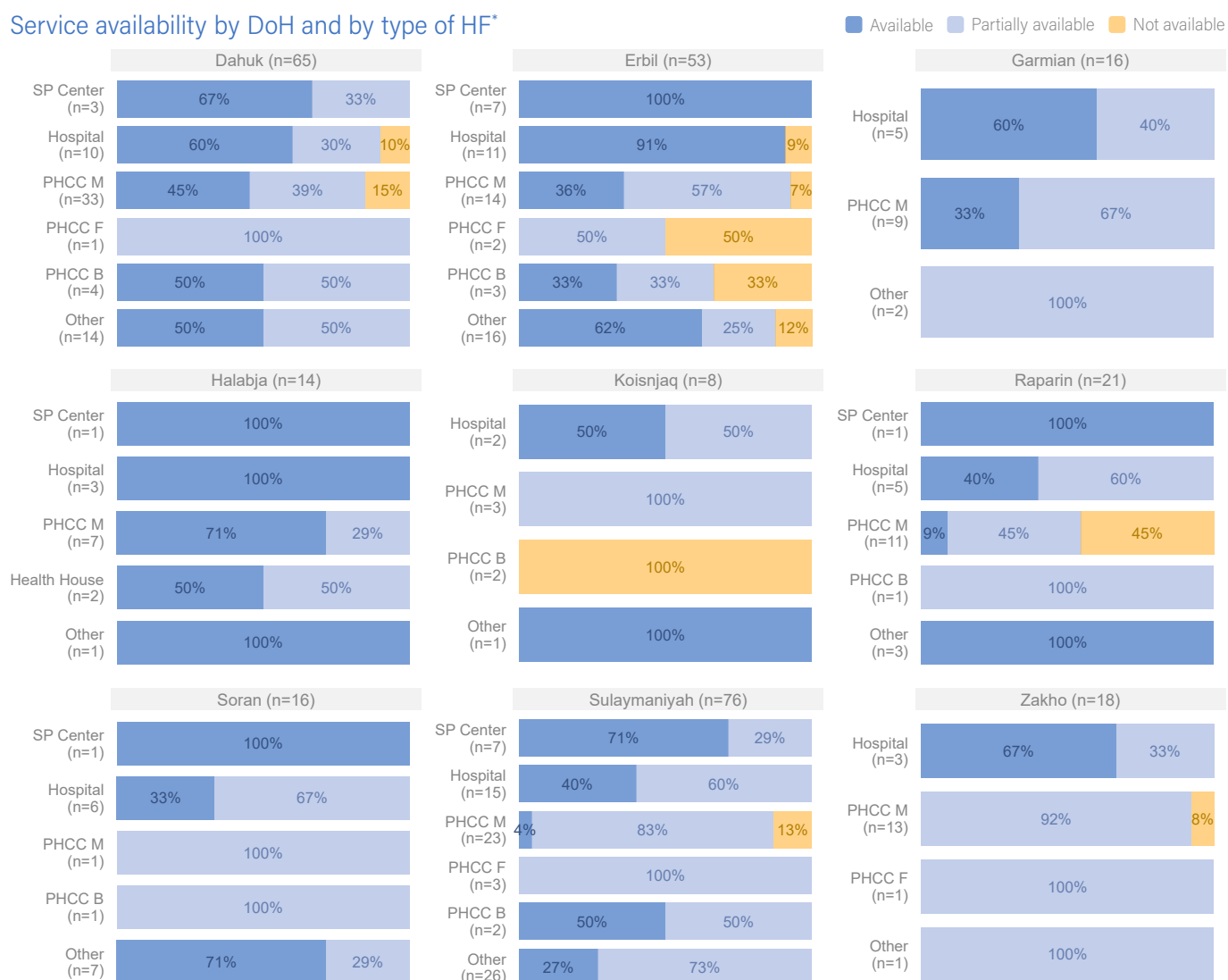
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



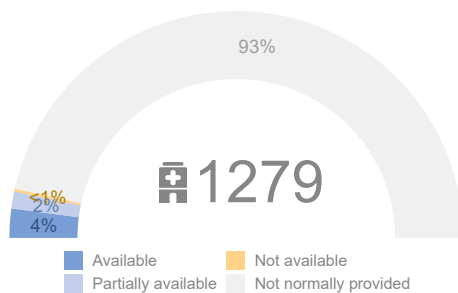
## Service availability by DoH and by type of HF\*



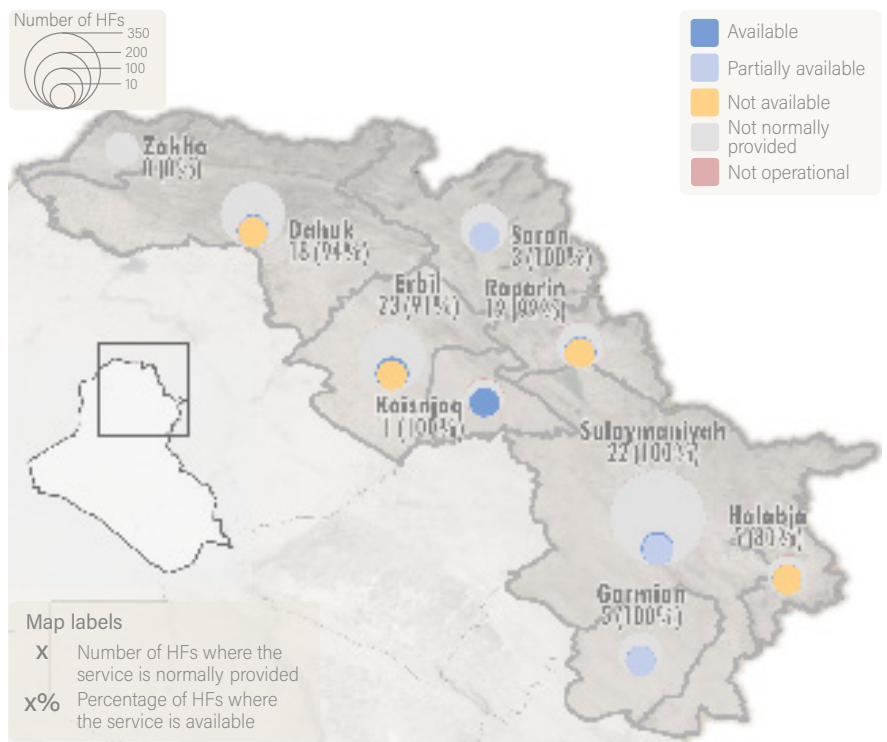
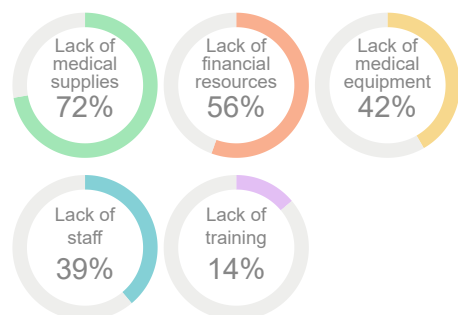
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# LABORATORY SERVICES TERTIARY LEVEL

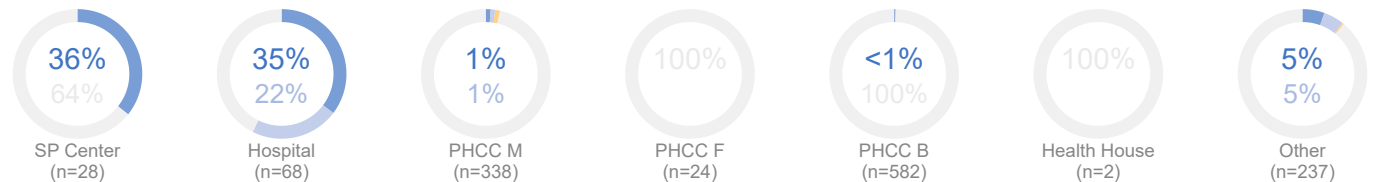
## Service availability



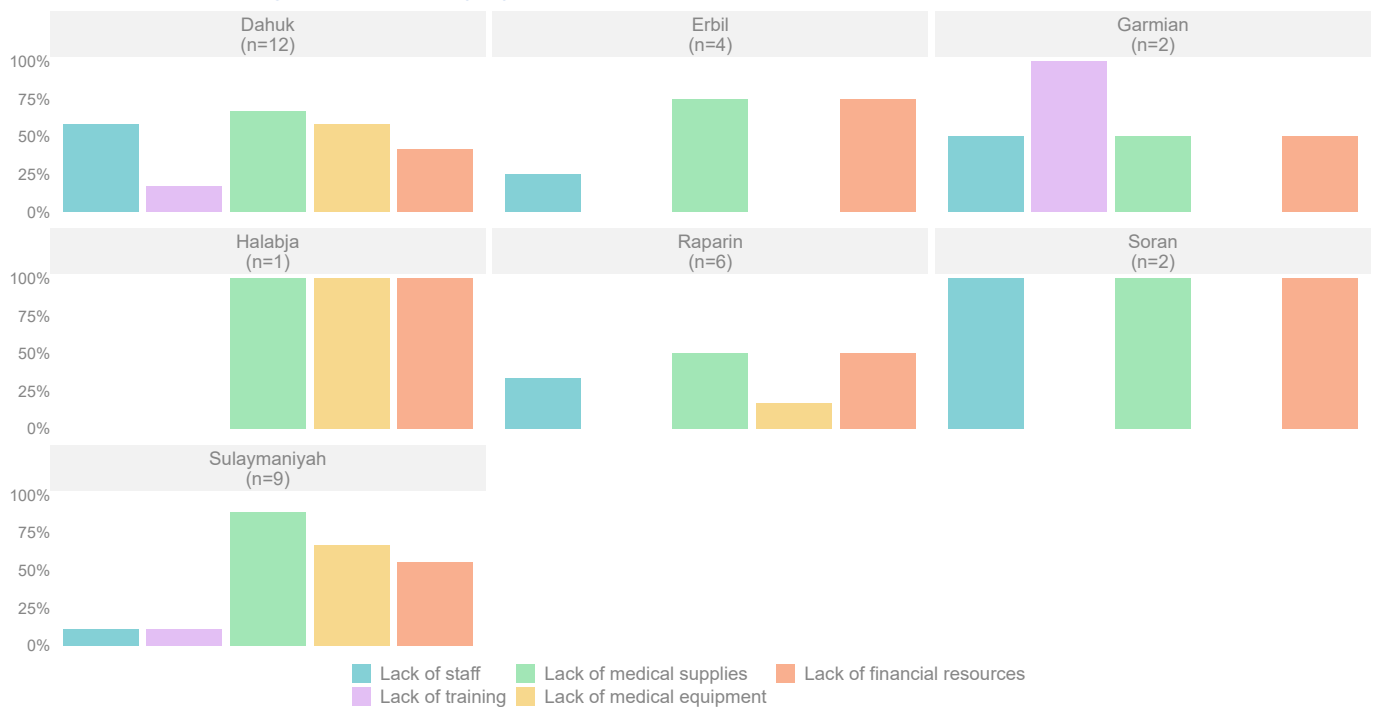
## Main barriers impeding service delivery n = 36



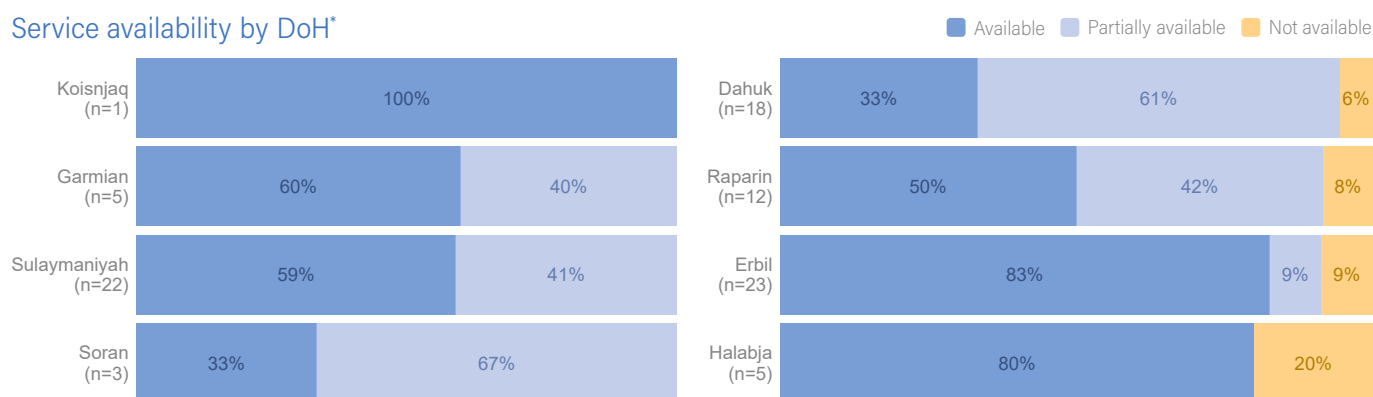
## Service availability by type of HF



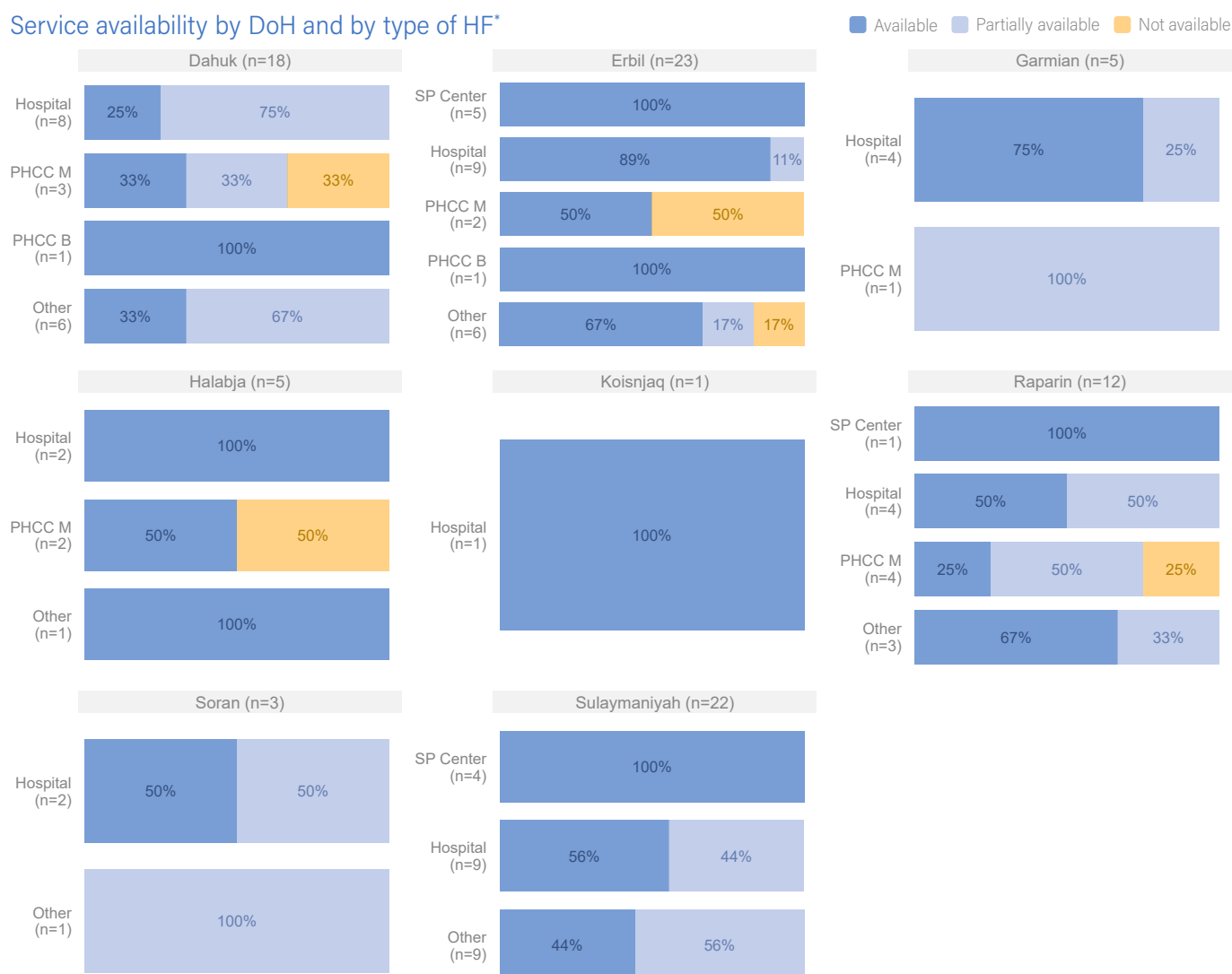
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



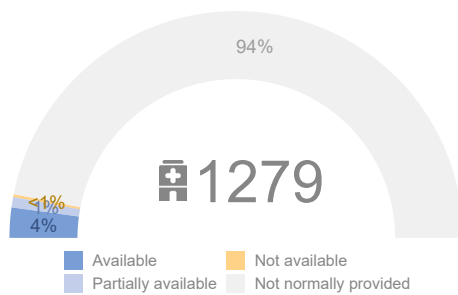
## Service availability by DoH and by type of HF\*



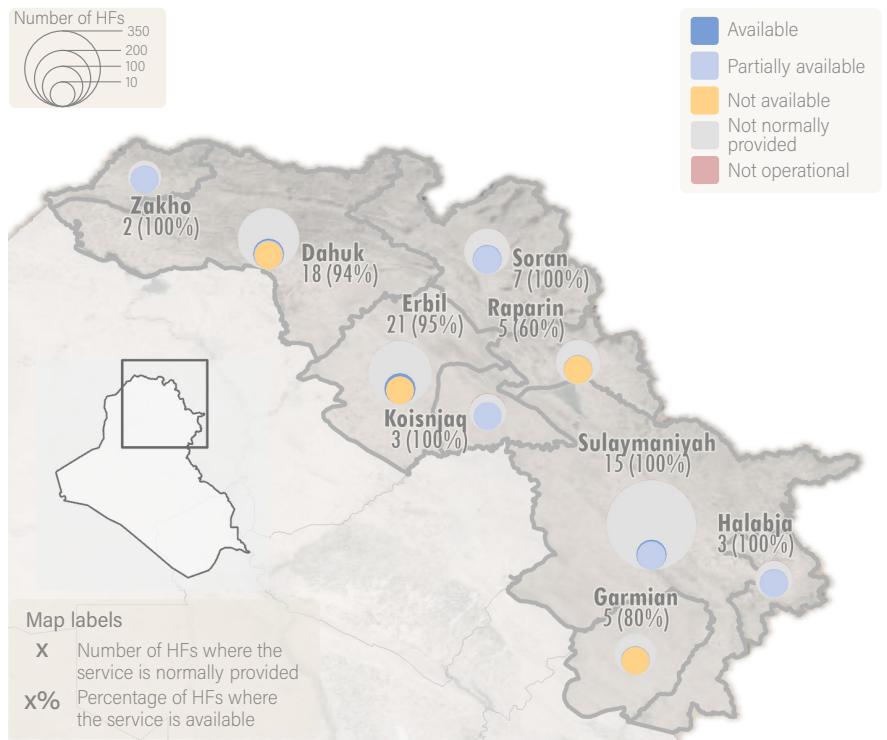
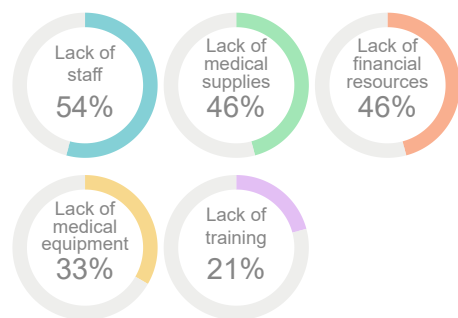
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# BLOOD BANK SERVICES

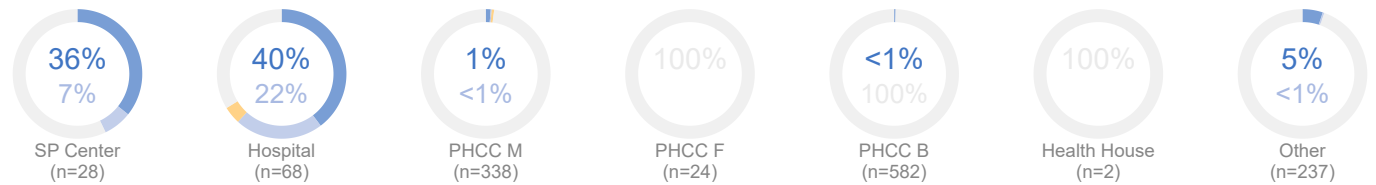
## Service availability



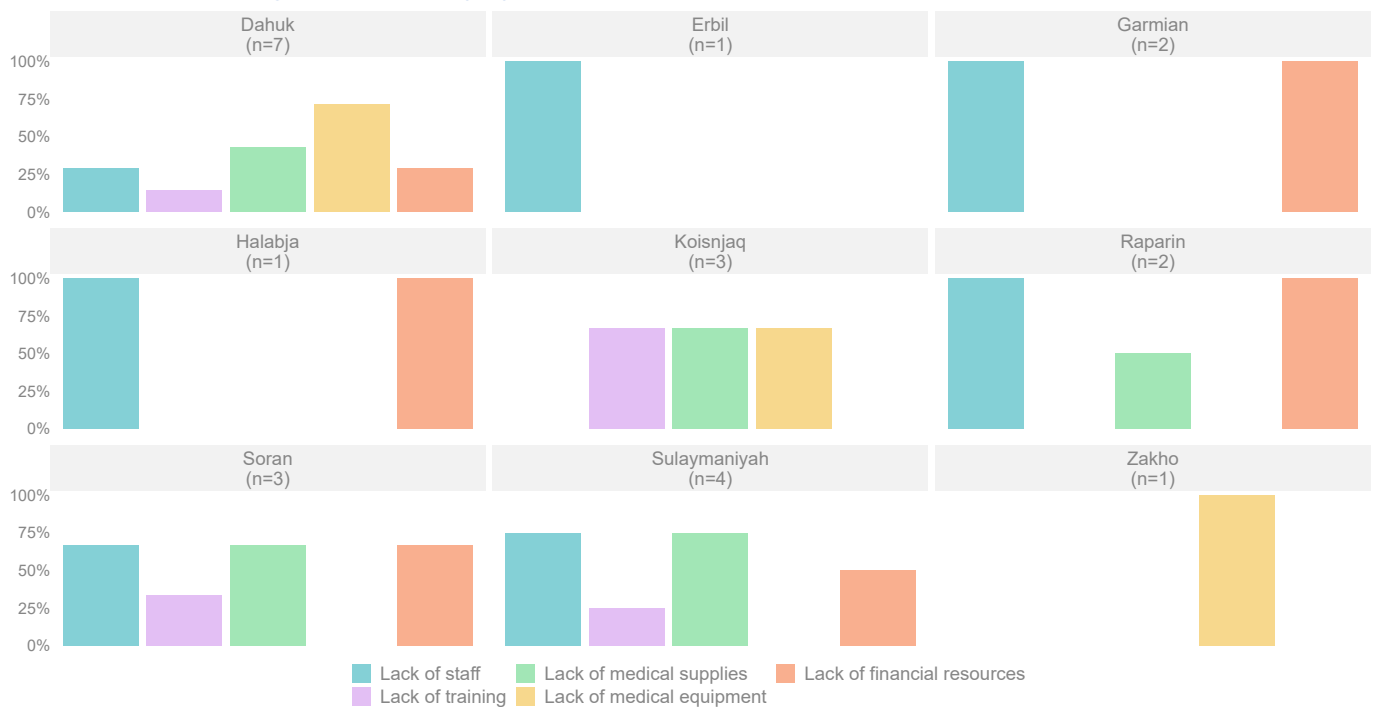
## Main barriers impeding service delivery n = 24



## Service availability by type of HF

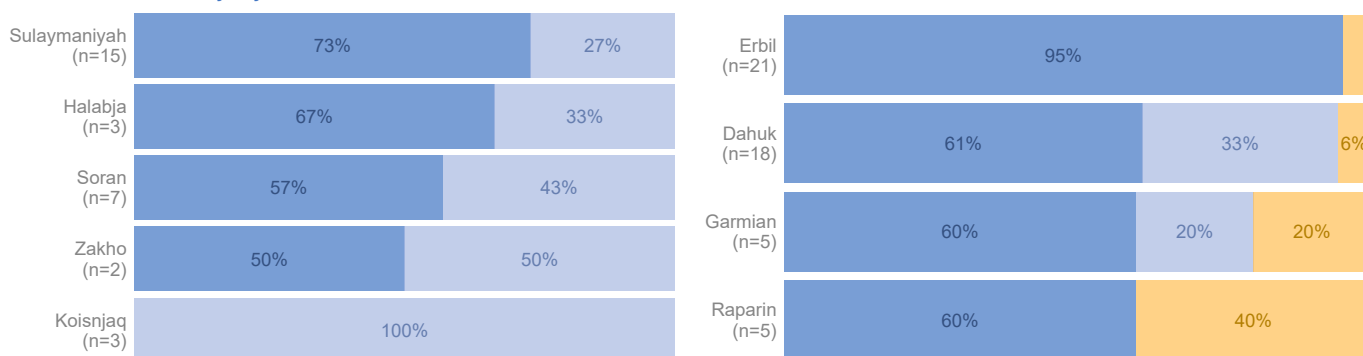


## Main barriers impeding service delivery by DoH



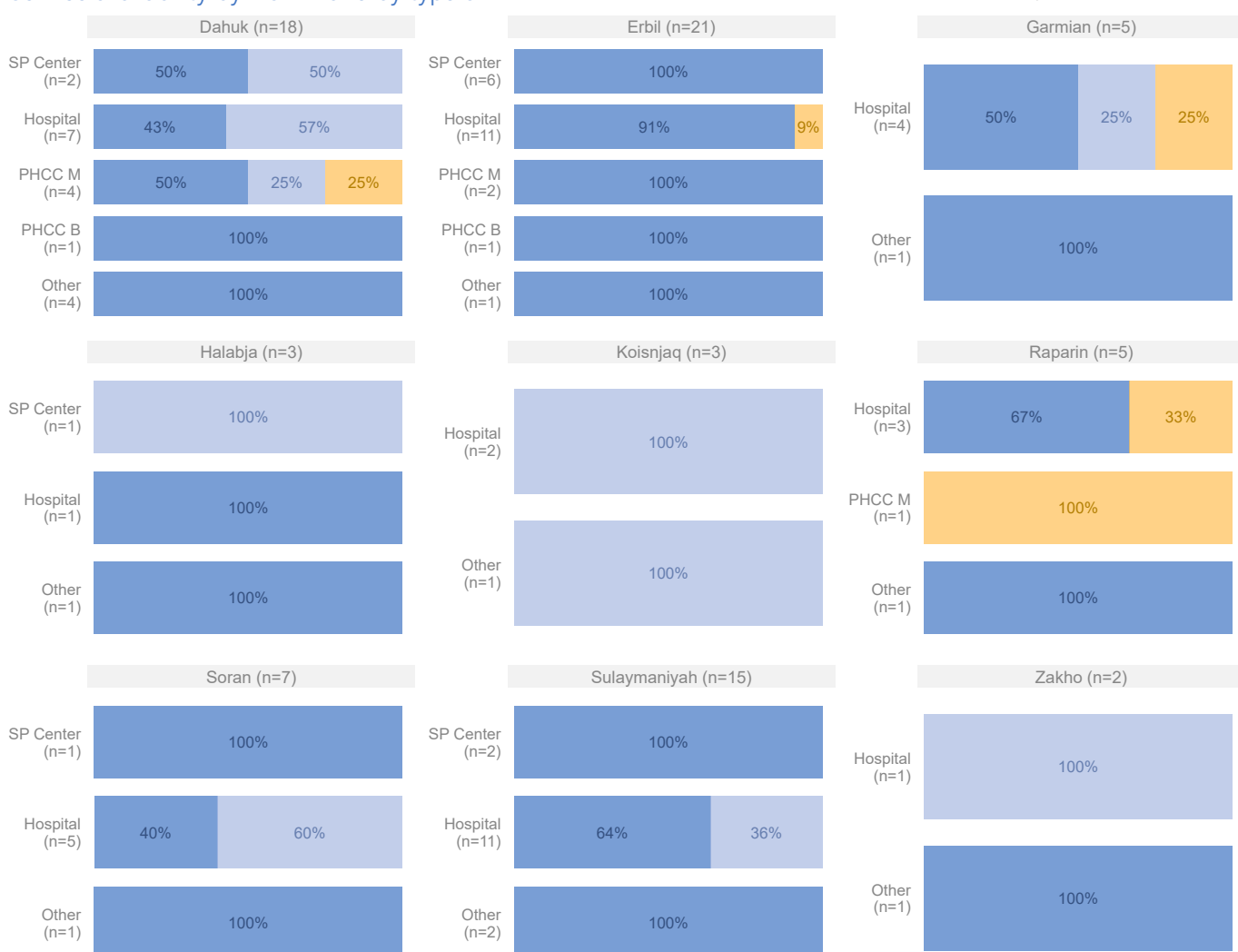
## Service availability by DoH\*

Available Partially available Not available



## Service availability by DoHv and by type of HF\*

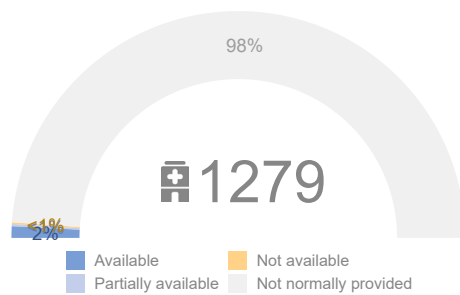
Available Partially available Not available



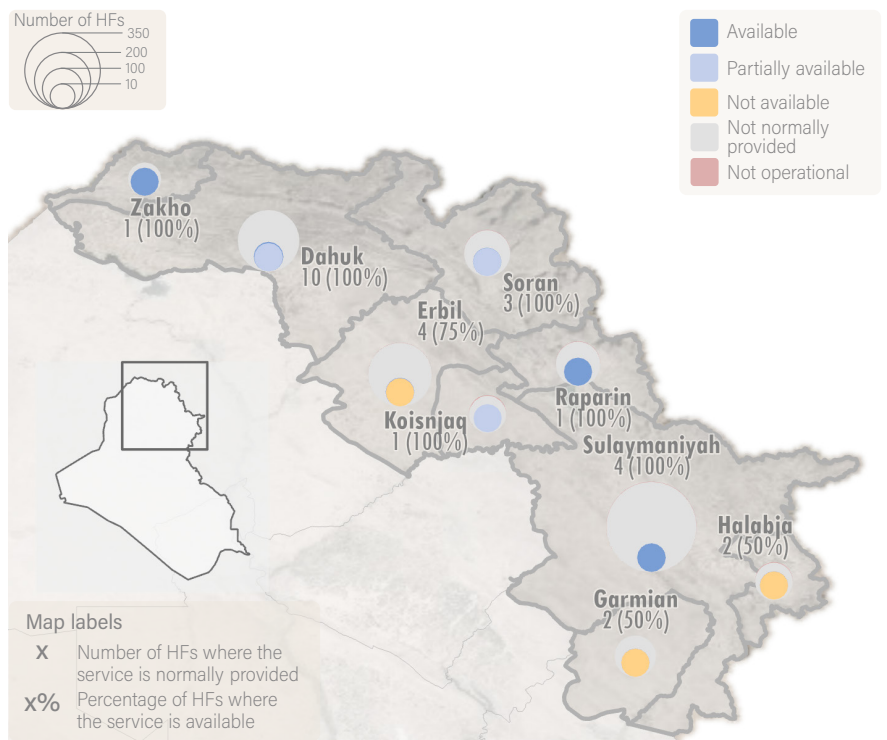
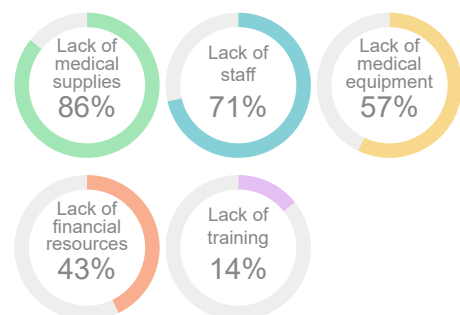
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# HEMODIALYSIS UNIT

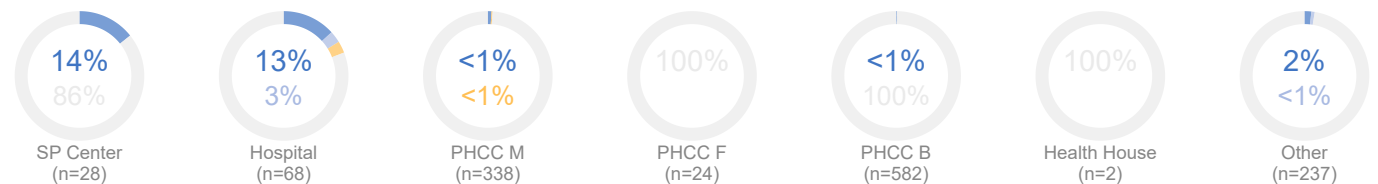
## Service availability



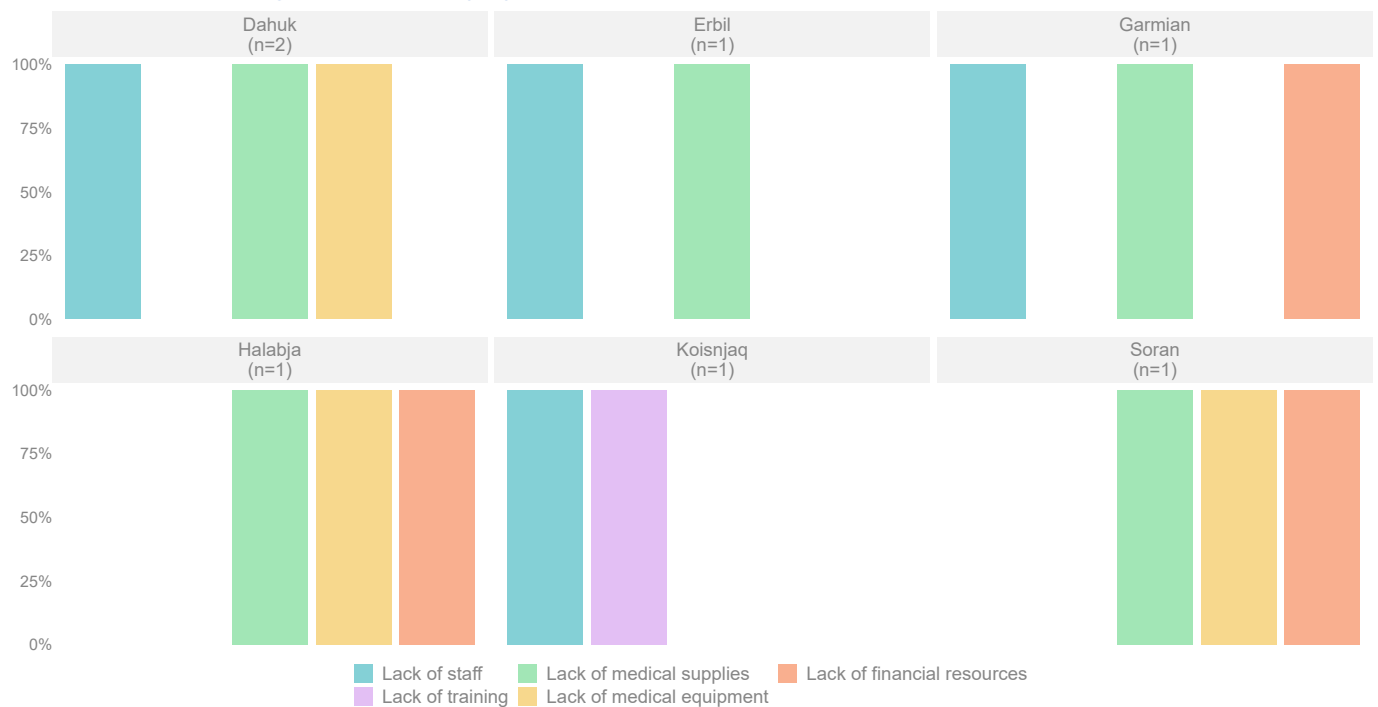
## Main barriers impeding service delivery n = 7



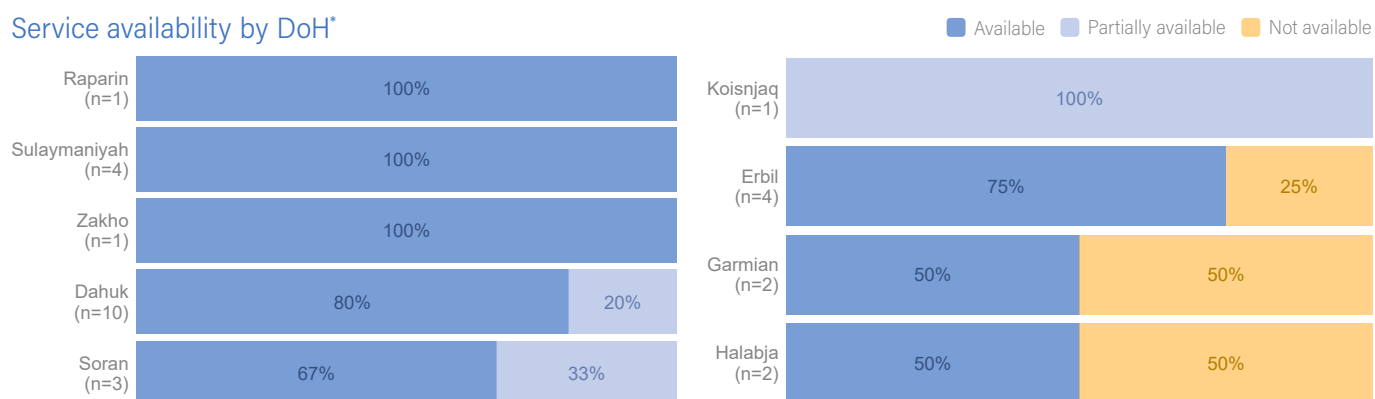
## Service availability by type of HF



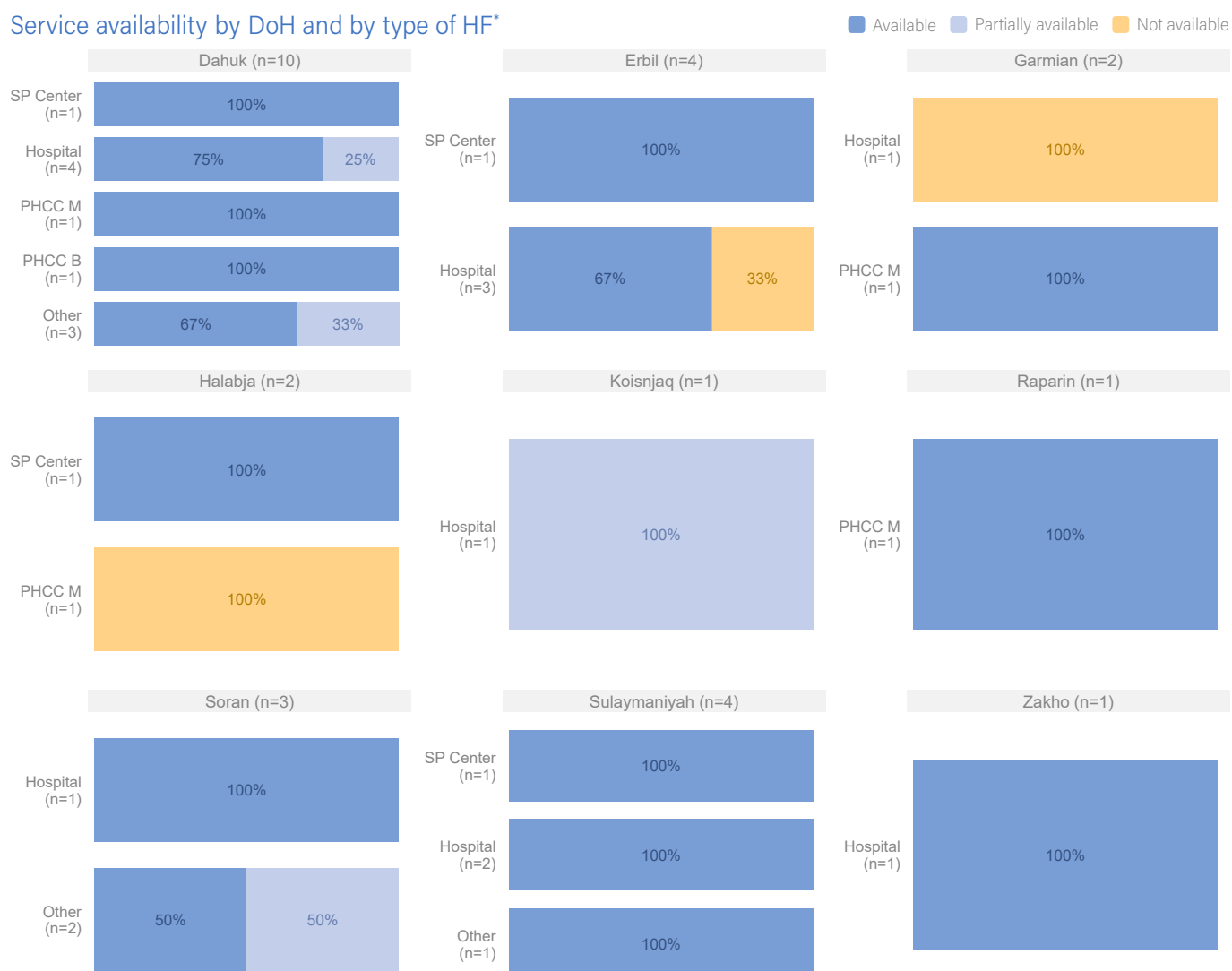
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



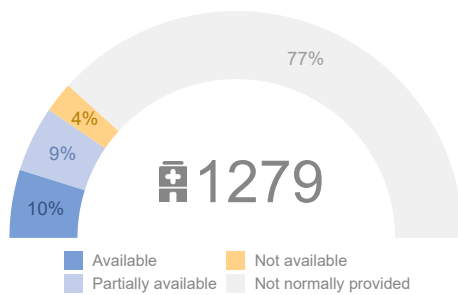
## Service availability by DoH and by type of HF\*



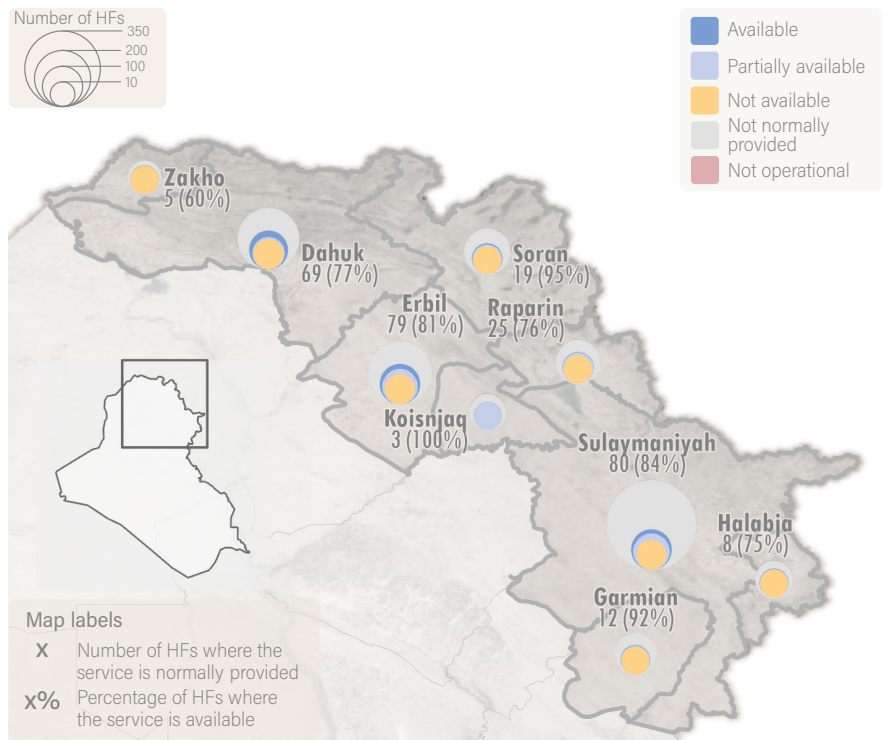
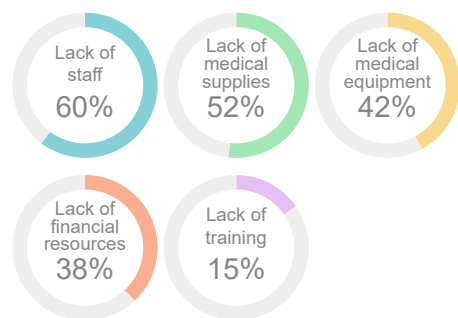
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# BASIC X-RAY SERVICE

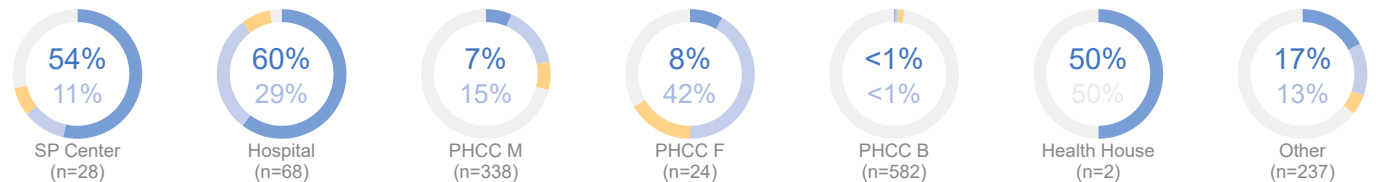
## Service availability



## Main barriers impeding service delivery n = 176



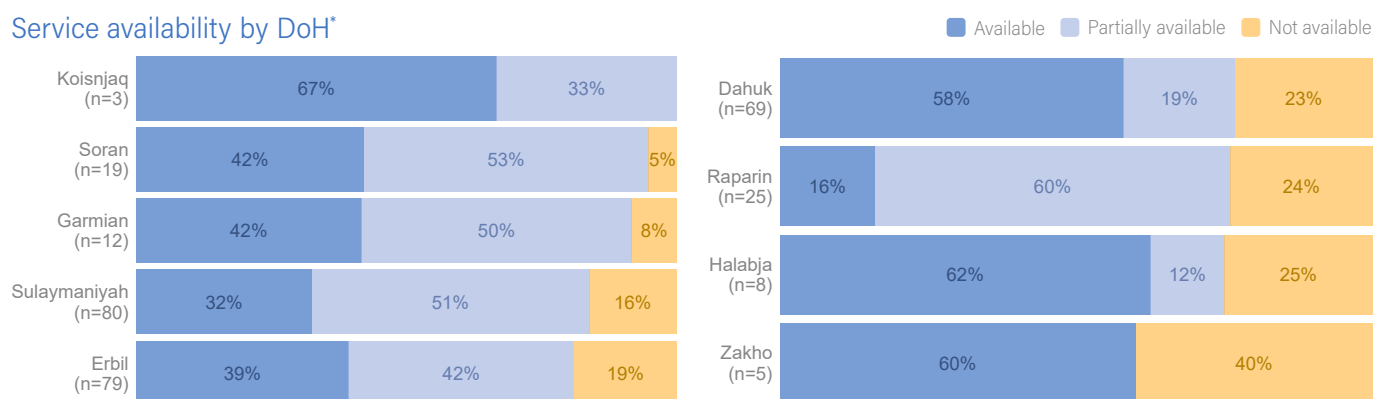
## Service availability by type of HF



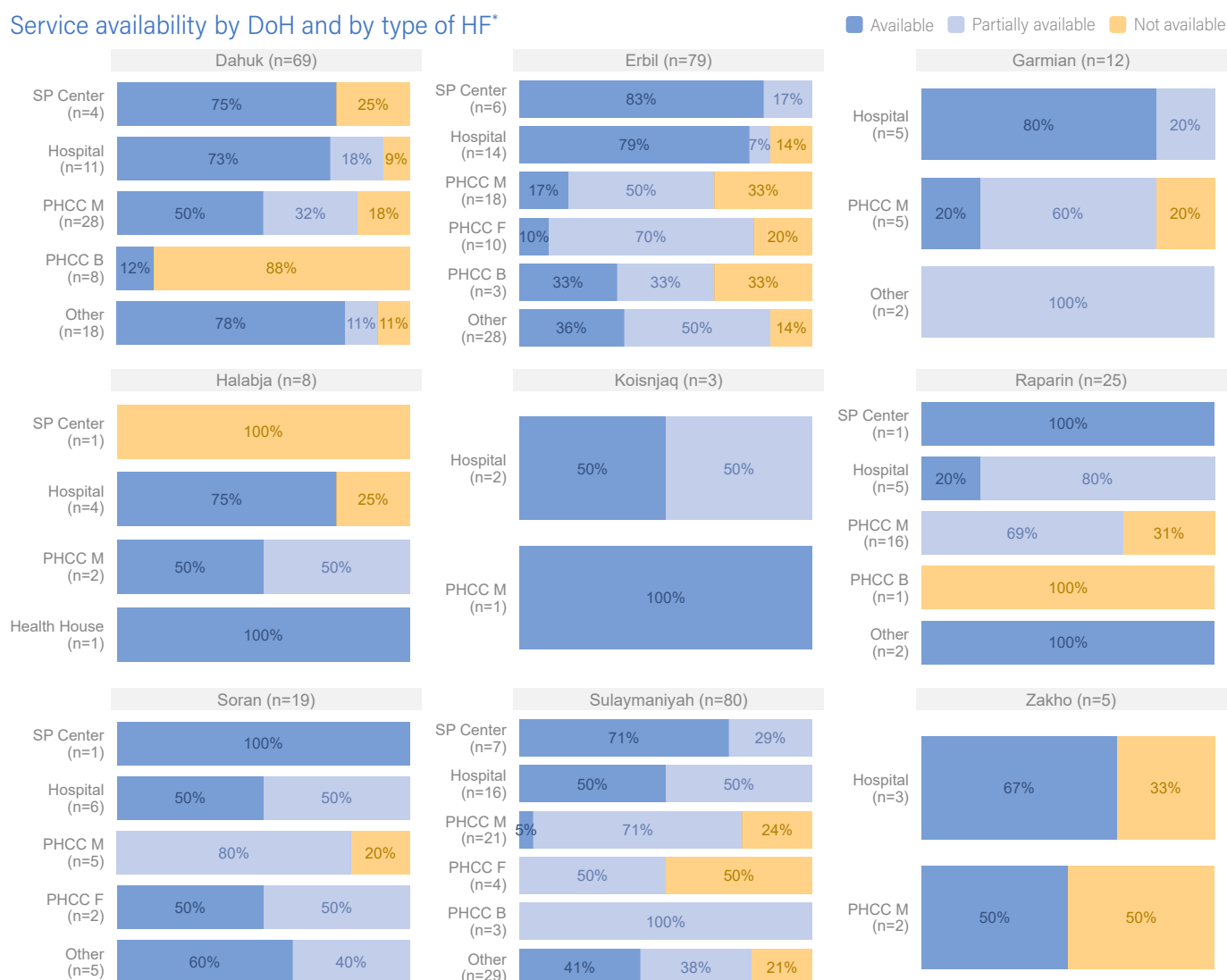
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



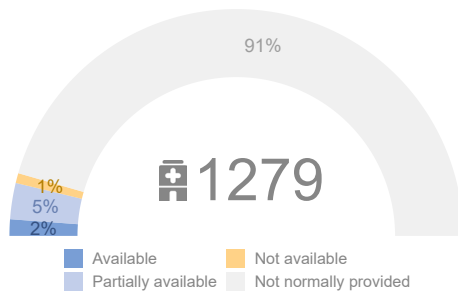
## Service availability by DoH and by type of HF\*



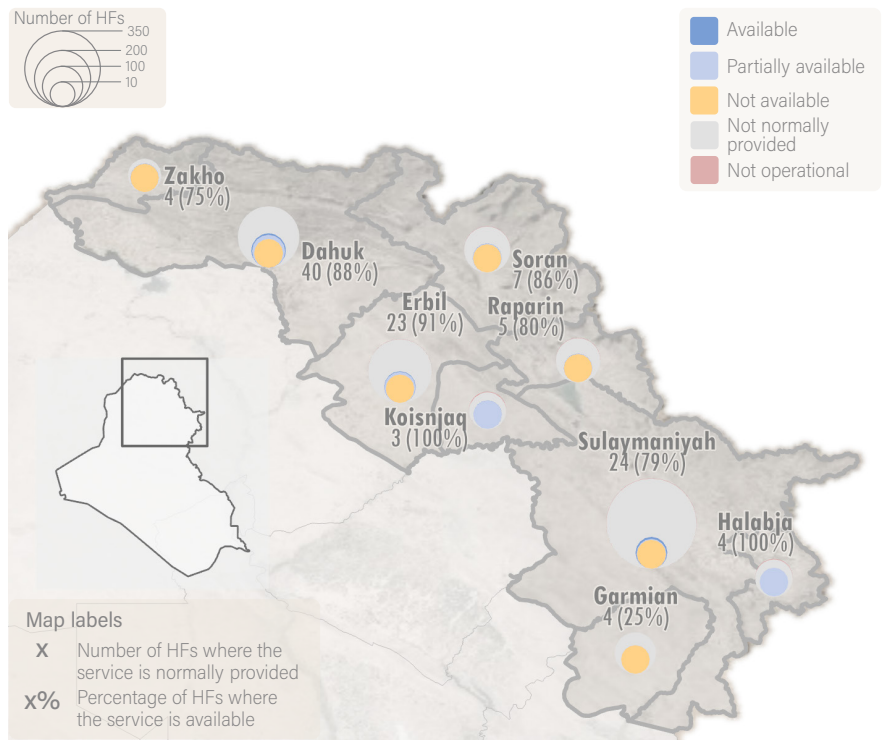
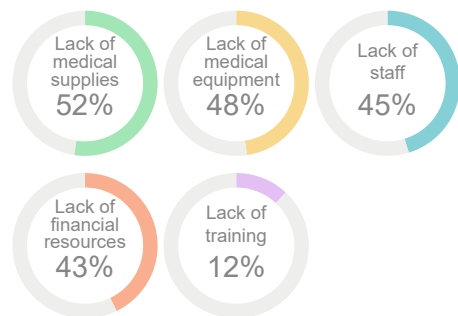
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# RADIOLOGY UNIT

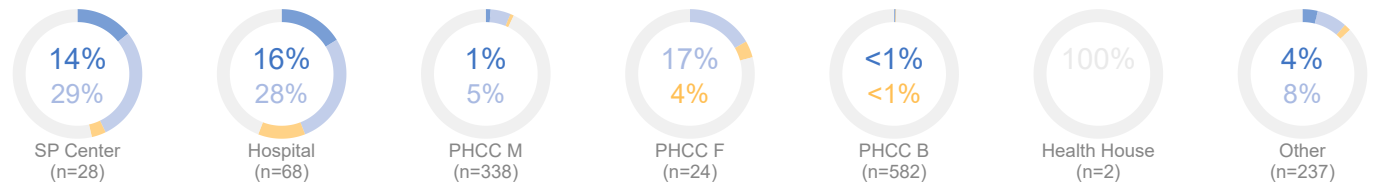
## Service availability



## Main barriers impeding service delivery n = 84



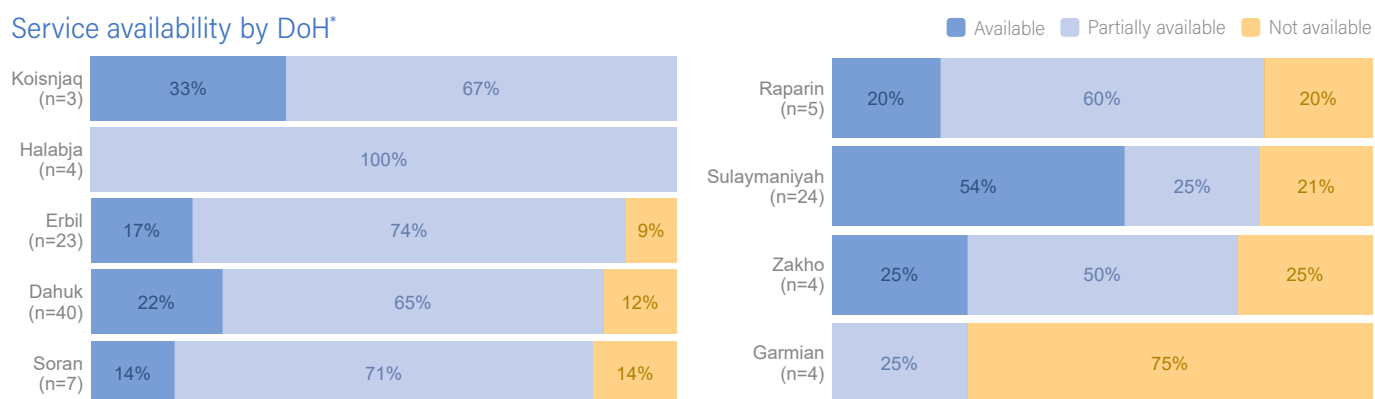
## Service availability by type of HF



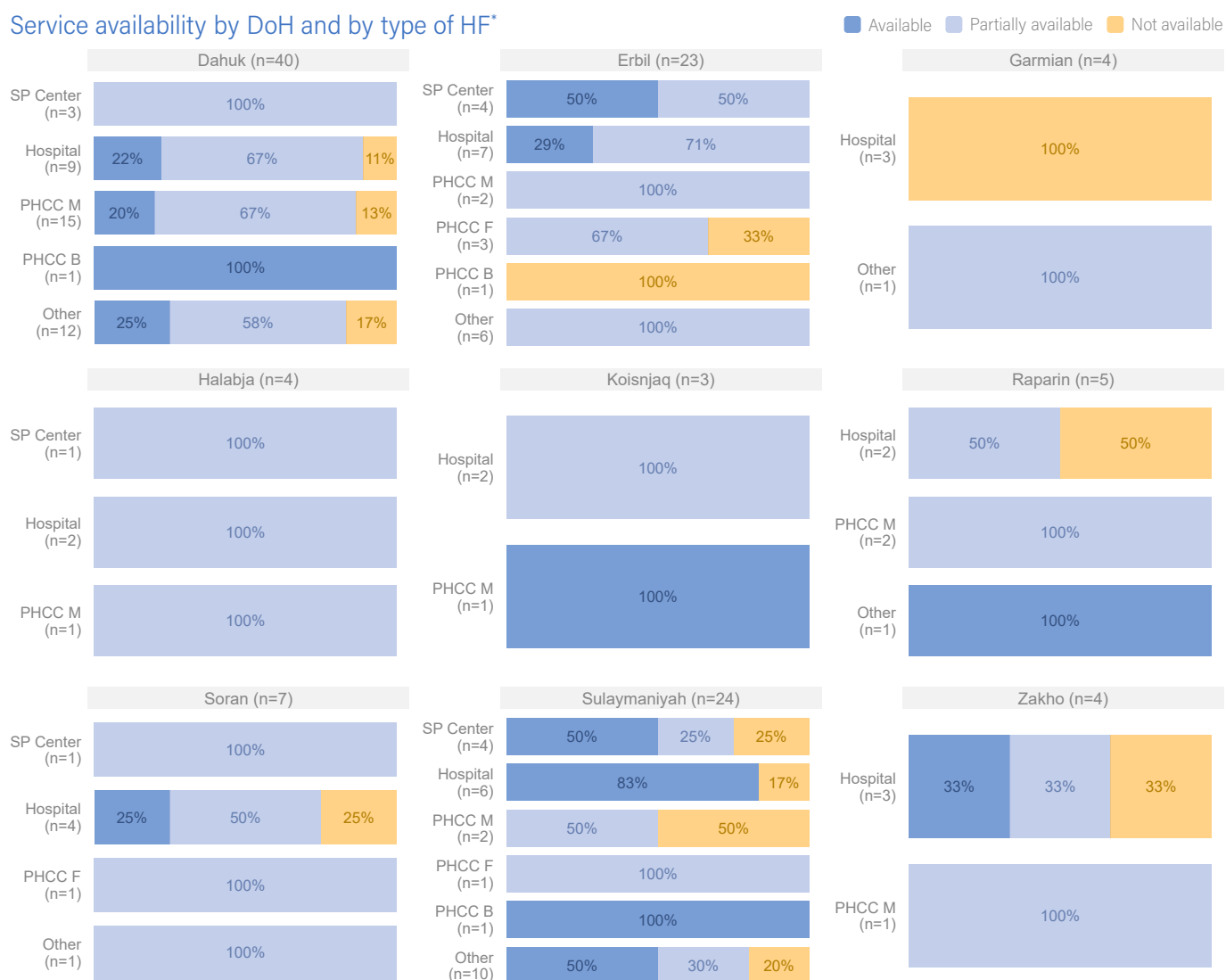
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



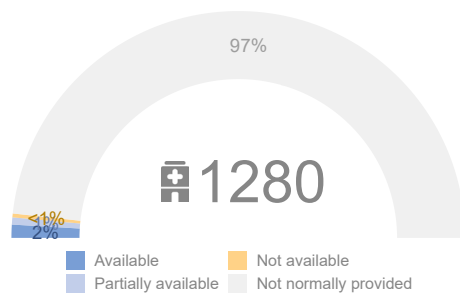
## Service availability by DoH and by type of HF\*



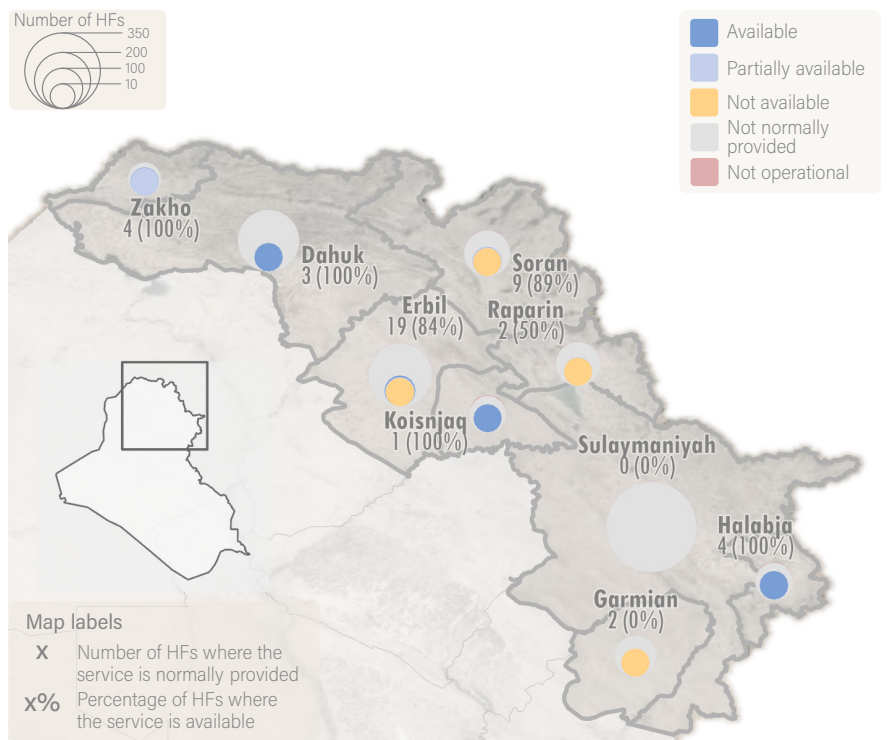
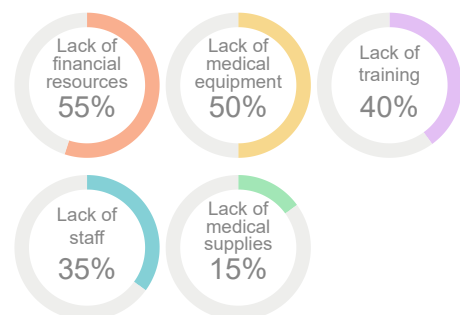
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# MEDICAL EVACUATION PROCEDURES

## Service availability



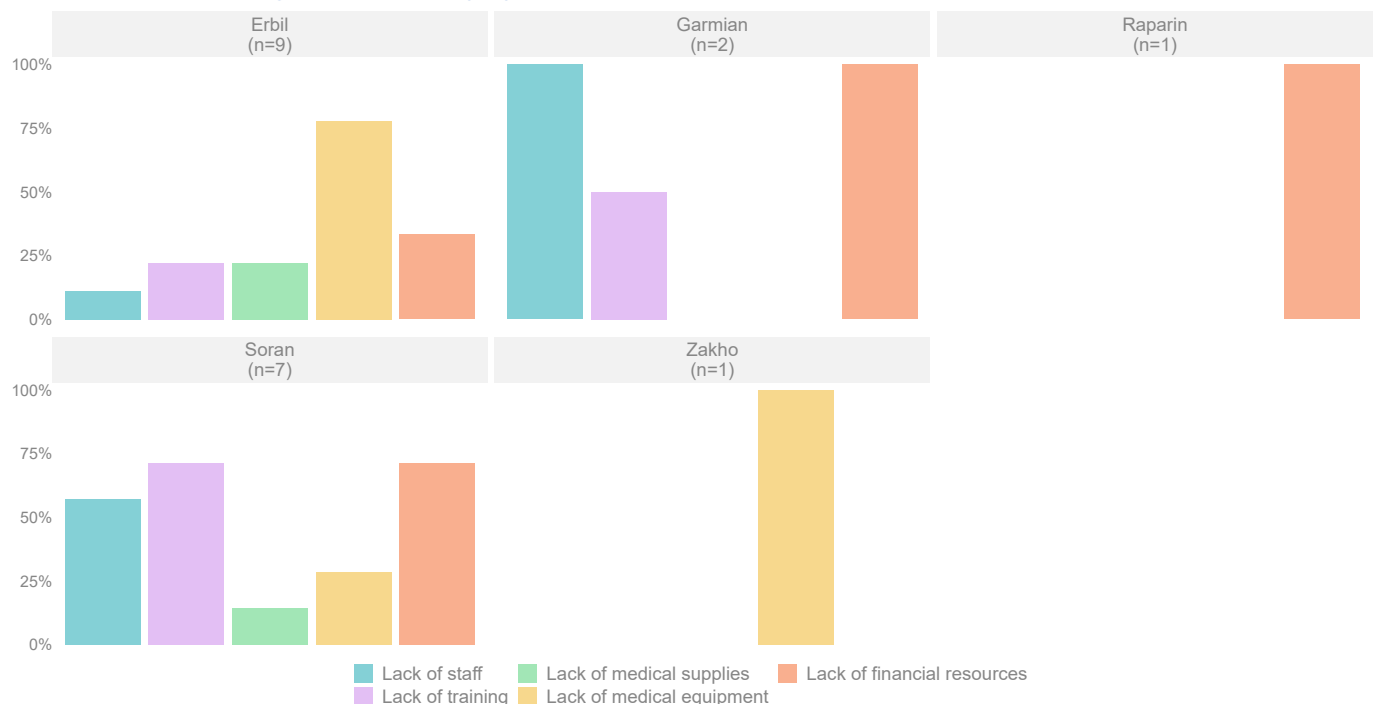
## Main barriers impeding service delivery n = 20



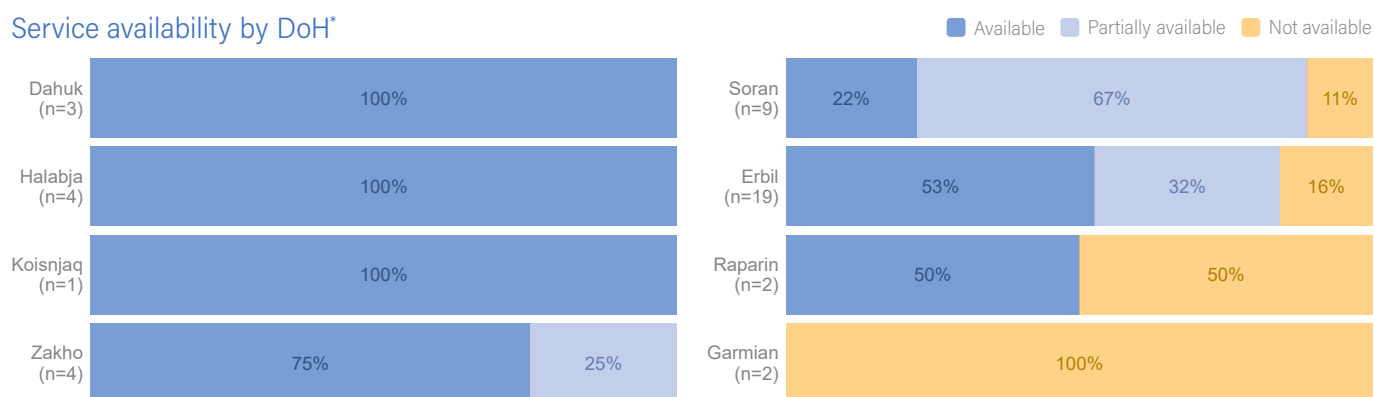
## Service availability by type of HF



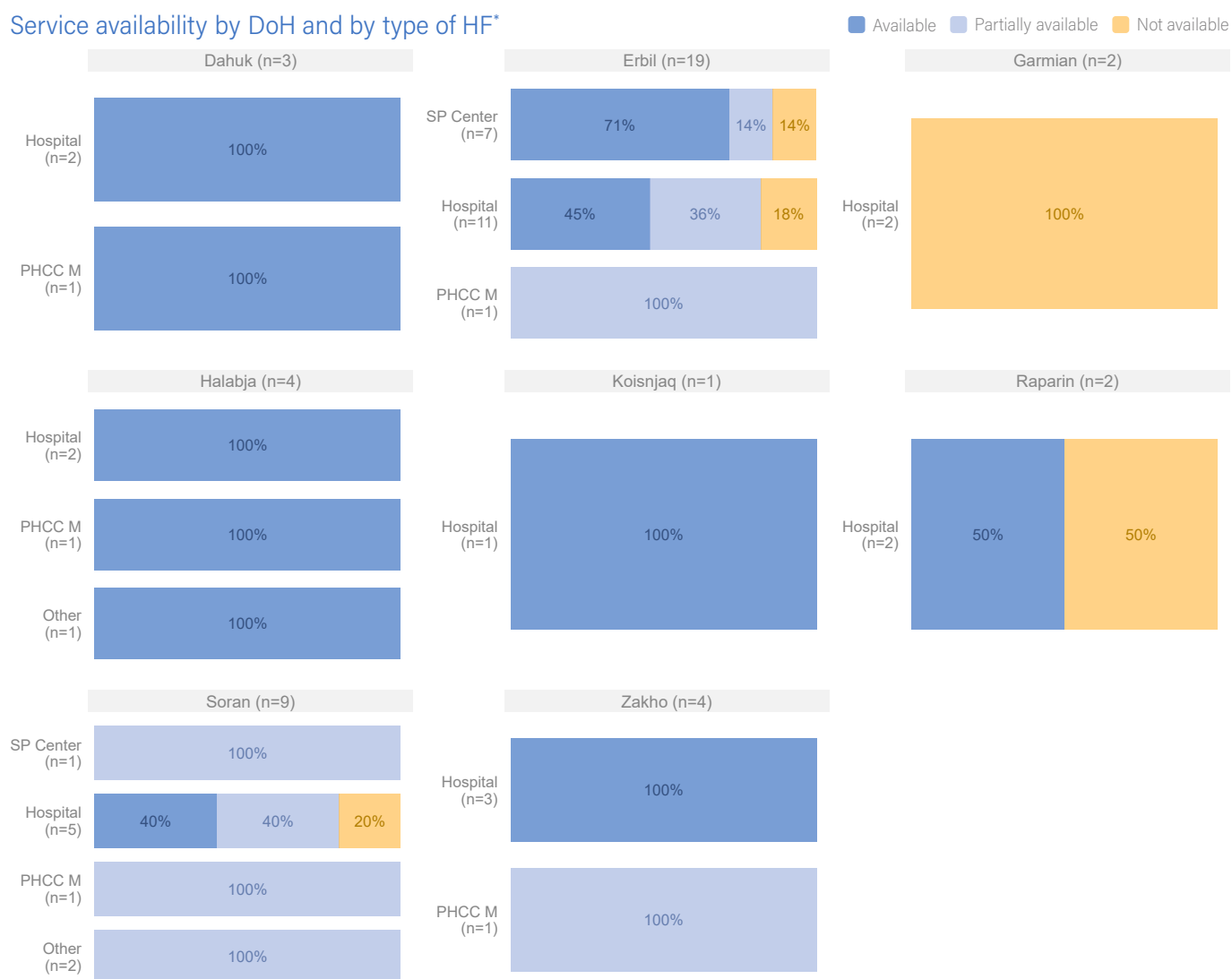
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



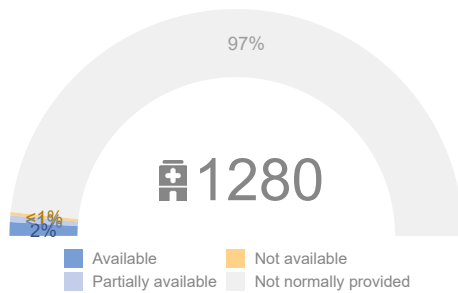
## Service availability by DoH and by type of HF\*



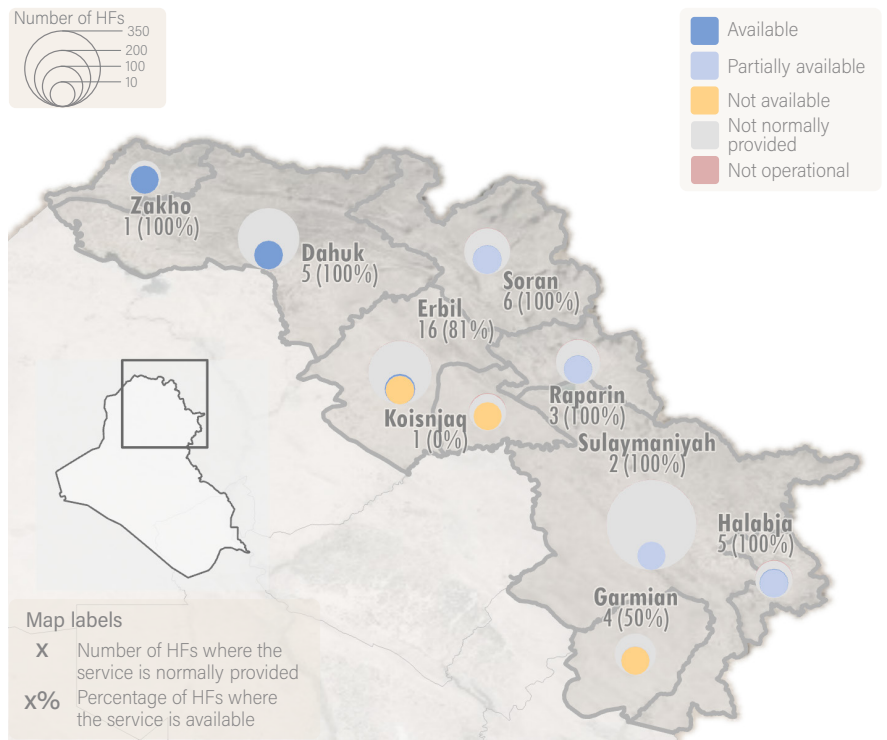
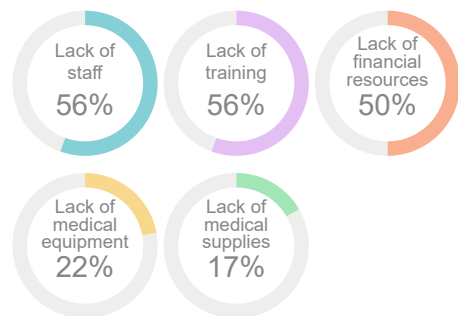
\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.

# PROCEDURES FOR MASS CASUALTY SCENARIOS

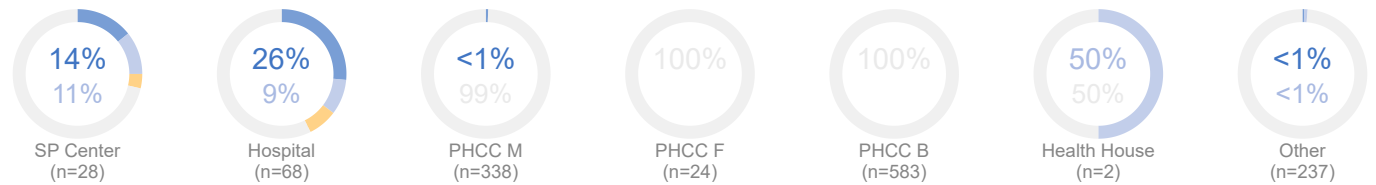
## Service availability



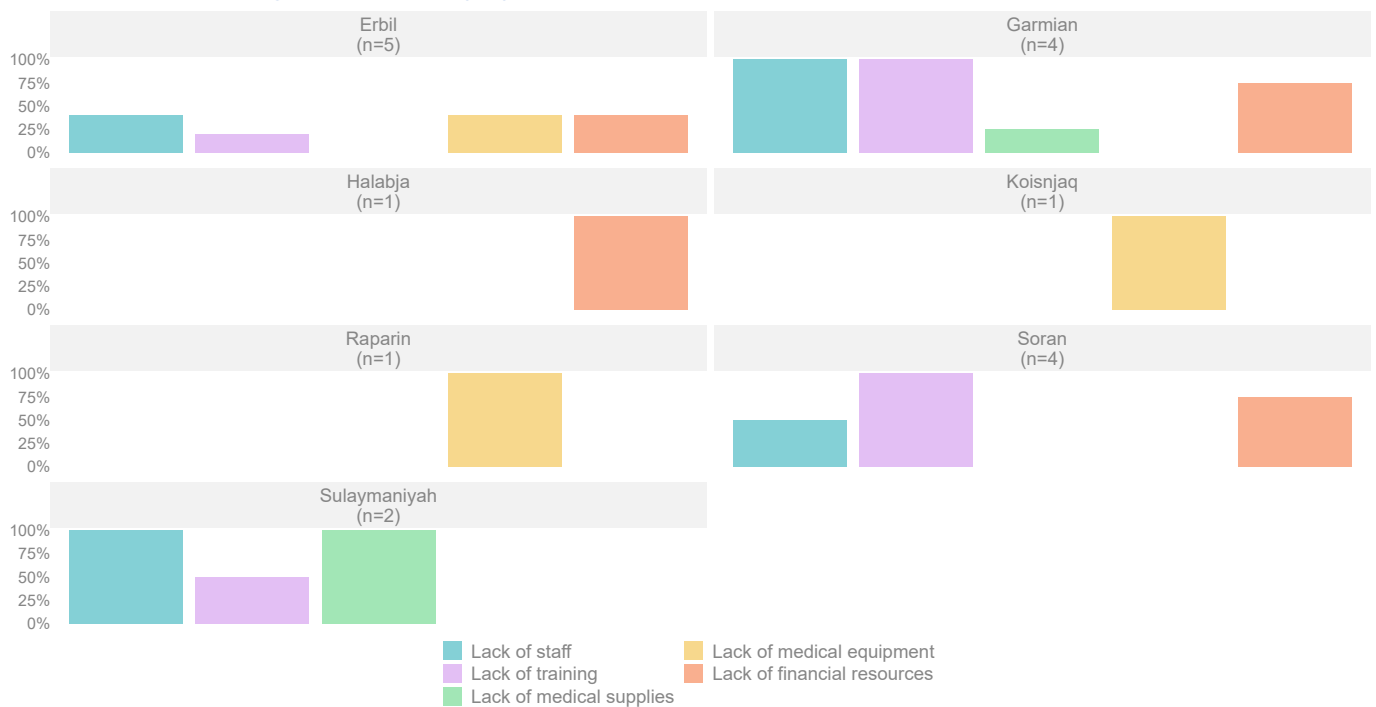
## Main barriers impeding service delivery n = 18



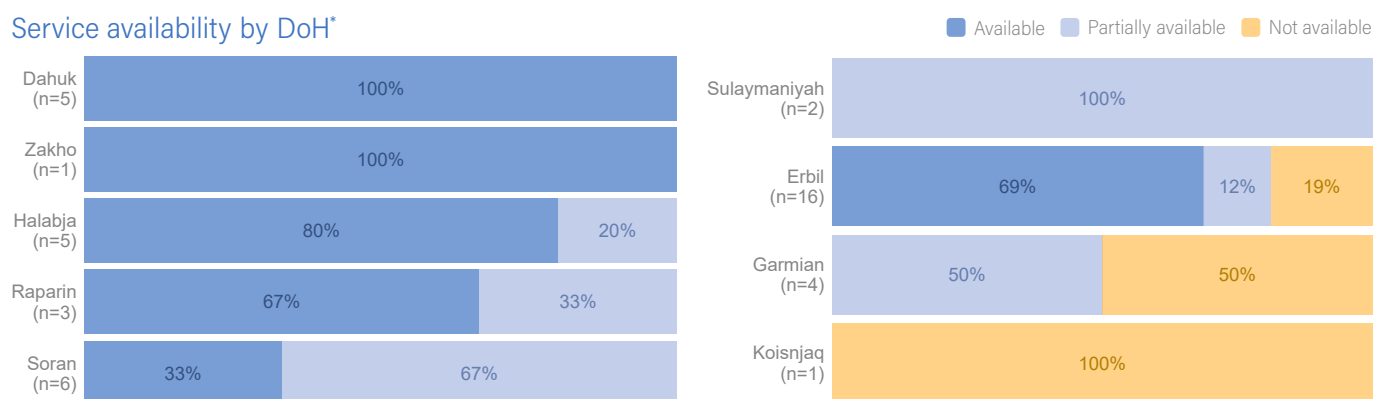
## Service availability by type of HF



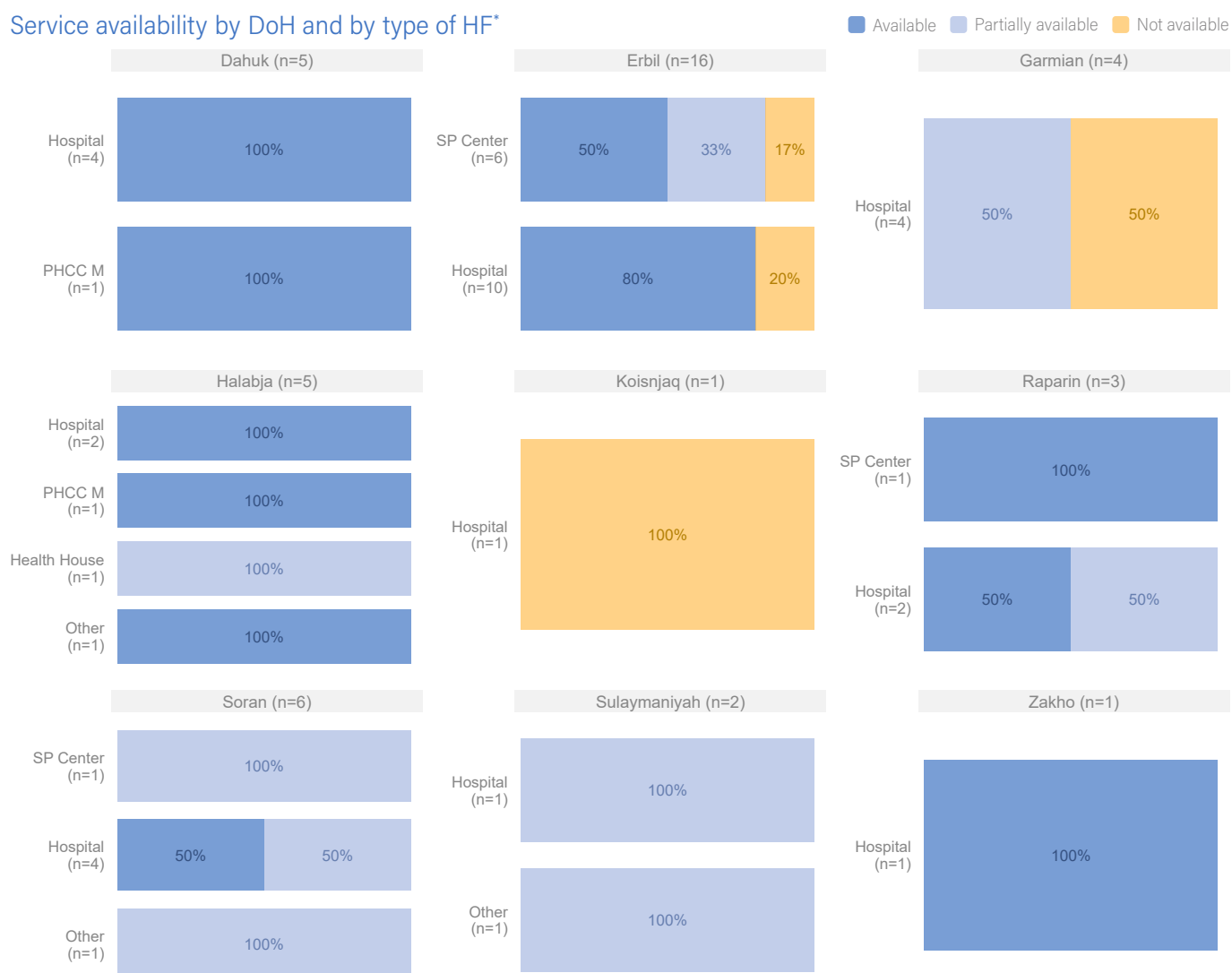
## Main barriers impeding service delivery by DoH



## Service availability by DoH\*



## Service availability by DoH and by type of HF\*



\* Health facilities where the service availability is unknown or where the service is not normally provided are excluded.



# ANNEX

# ANNEX I: HeRAMS SERVICE DEFINITIONS

SERVICE NAME	DEFINITION	SERVICE EXPECTED						
		SP Center	Hospital	PHCC M	PHCC F	PHCC B	Health House	Other*
REQUEST FOR AMBULANCE SERVICES BY THE PATIENT	Request for ambulance services by the patient: User-activated dispatch of basic ambulance services from district-level staging center (e.g., ambulance pool)		X					X
RECOGNITION OF DANGER SIGNS	Recognition of danger signs: in neonates, children and adults, including early recognition of signs of serious infection, with timely referral to higher-level care.		X	X	X	X		
ACUITY-BASED FORMAL TRIAGE	Acuity-based formal triage: of children and adults at first entry to the facility (with a validated instrument such WHO/ ICRC Interagency Triage Tool)		X					
WHO BASIC EMERGENCY CARE BY PREHOSPITAL PROVIDER	WHO Basic emergency care by prehospital provider: Initial syndrome-based management at scene by prehospital providers for difficulty breathing, shock, altered mental status, and polytrauma.			X				X
WHO BASIC EMERGENCY CARE	WHO Basic Emergency Care: Basic syndrome-based management of difficulty breathing, shock, altered mental status, and polytrauma for neonates, children and adults		X					
ADVANCED SYNDROME-BASED MANAGEMENT	Advanced Syndrome-based management: of difficulty breathing, shock, altered mental status, and polytrauma in dedicated emergency unit, including for neonates, children and adults (Interventions include intubation, mechanical ventilation, surgical airway, and placement of chest drain, hemorrhage control, defibrillation, administration of IV fluids via peripheral and central venous line with adjustment for age and condition, including malnutrition; administration of essential emergency medications)		X					
MONITORED REFERRAL	Monitored referral: Direct provider monitoring during transport to appropriate healthcare facility and structured handover to facility personnel.		X					X
REFERRAL CAPACITY	Referral capacity: referral procedures, means of communication, access to transportation		X					
ACCEPTANCE OF REFERRALS	Acceptance of referrals: acceptance of referral with remote decision support for prehospital providers and primary-level facilities, and condition-specific protocol-based referral to higher levels	X	X					
ACCEPTANCE OF COMPLEX REFERRALS	Acceptance of complex referrals: with remote decision support for prehospital providers and lower-level facilities	X	X					
OUTPATIENT SERVICES FOR PRIMARY CARE	Outpatient services for primary care: with availability of all essential drugs for primary care as per national guidelines.			X	X			
OUTPATIENT DEPARTMENT FOR SECONDARY CARE	Outpatient department for secondary care: Outpatient department (OPD) with availability of all essential drugs for secondary care as per national guidelines (including NCD and pain management), and at least one general practitioner.		X					
HOME VISITS	Home visits: including promotion of self-care practices, monitoring of noncommunicable diseases (NCD) medication compliance and palliative care.			X	X	X		X
MINOR TRAUMA DEFINITIVE MANAGEMENT	Minor trauma definitive management: pain management, tetanus toxoid and human antitoxin, minor surgery kits, suture absorbable/silk with needles, disinfectant solutions, bandages, gauzes, cotton wool.		X	X	X	X	X	X

SERVICE NAME	DEFINITION	SERVICE EXPECTED						
		SP Center	Hospital	PHCC M	PHCC F	PHCC B	Health House	Other*
EMERGENCY AND ELECTIVE SURGERY	Emergency and elective surgery: full surgical wound care, advanced fracture management through at least one operating theatre with basic general anesthesia (with or without gas)	x	x					
EMERGENCY AND ELECTIVE SURGERY WITH AT LEAST TWO OPERATING THEATRES	Emergency and elective surgery with at least two operating theatres: with pediatric and adult gaseous anesthetic	x	x					
ORTHOPEDIC/TRAUMA WARD	Orthopedic/trauma ward: for advanced orthopedic and surgical care, including burn patient management	x	x					
SHORT HOSPITALIZATION CAPACITY	Short hospitalization capacity (maximum 48 hours)	x	x					
20 INPATIENT BED CAPACITY	20 Inpatient bed capacity: at least 20 inpatient bed capacity with 24/7 availability of medical doctors (MD), nurses and midwives, and 4-5 beds for short observation before admission, or 24/48-hour hospitalization	x	x					
50 INPATIENT BED CAPACITY	50 inpatient bed capacity: with pediatric and ob-gyn wards with 24/7 availability of doctors and/or specialists (general surgeon, ob-gyn, pediatrician, others)		x					
INPATIENT CRITICAL CARE MANAGEMENT	Inpatient critical care management: with availability of mechanical ventilation, infusion pumps, and third-line emergency drugs	x	x					
INTENSIVE CARE UNIT	Intensive care unit: with at least 4 beds	x	x					
BASIC LABORATORY	Basic laboratory: with general microscopy	x	x	x	x	x		x
LABORATORY SERVICES SECONDARY LEVEL	Laboratory services secondary level	x	x					x
LABORATORY SERVICES TERTIARY LEVEL	Laboratory services tertiary level: including electrolyte and blood gas concentrations, public health laboratory capacities	x	x					x
BLOOD BANK SERVICES	Blood bank services		x					x
HEMODIALYSIS UNIT	Hemodialysis unit	x	x					
BASIC X-RAY SERVICE	Basic X-ray service: X-ray service (basic radiological unit) and ultrasound	x	x	x	x			x
RADIOLOGY UNIT	Radiology unit: with X-ray with stratigraphy, intraoperation X-ray intensifier, ultrasound, MRI and/or CT scan	x	x					
MEDICAL EVACUATION PROCEDURES	Medical evacuation procedures (medevac): means of transport and referral network for patients requiring highly specialized care		x					
PROCEDURES FOR MASS CASUALTY SCENARIOS	Procedures for mass casualty scenarios: Procedures in place for early discharge of post-surgery patients through referral to secondary hospitals, in mass casualty scenario		x					

\* Other includes: Blood Bank Center - Branch (1), Blood Bank Center - Main (7), Central Public Health Laboratory (14), Chest and Respiratory Diseases Unit (3), Disease Prevention Sector (8), Emergency Center (3), Forensic Medicine Center (11), Health Sector (23), Immediate First Aid Center (11), Mobile Clinic (1), Mobile Team (230), Public Health Clinic (89), Other (73).

## ANNEX II: POPULATION ESTIMATES

GOVERNORATE	DIRECTORATE OF HEALTH (DoH)	DISTRICT	POPULATION ESTIMATES
<b>Dahuk</b>			<b>1,432,369</b>
	Dahuk		1,241,819
		Dahuk	339,196
		Akre	204,464
		Amedi	76,769
		Bardarash	155,639
		Mangesh	331,261
		Shekhan	22,742
		Sumel	111,748
	Zakho		190,550
		Zakho	190,550
<b>Erbil</b>			<b>2,055,448</b>
	Erbil		1,848,396
		Dashte Hawler	382,818
		Erbil Center	922,642
		Khabat	189,082
		Shaqlawā	154,912
		Soran	198,942
	Koisanjaq		124,144
		Koisanjaq	124,144
	Soran		82,908
		Barzan	53,001
		Choman	29,907
<b>Sulaymaniyah</b>			<b>2,396,206</b>
	Garmian		299,100
		Garmian	299,100
	Halabja		108,620
		Halabja	108,620
	Raparin		410,200
		Pshdar	140,200
		Rania	270,000
	Sulaymaniyah		1,578,286
		Bazyan	75,500
		Chamchamal	228,100
		Darbandikhan	70,900
		Dokan	60,990
		Sharazoor	152,250
		Sharbazher	10,606
		Sulaymaniyah	901,010
		Zimnako	78,930
<b>TOTAL</b>			<b>5,884,023</b>

